



# Precision Rated Optics

Work with a PRO!

Sales, Service, Support

USA Proud 



## Product Catalog

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# Part of the Adtelli Group

In the constantly-changing field of fiber optics, the best tool you can have is a reliable, experienced partner. The Adtelli Group is a collection of companies whose mission is the betterment of the fiber optic industry.

At Adtelli, we combine a deep understanding of the communications market with many years of systems integration experience, extensive knowledge of proprietary and open systems and, most importantly, how to make everything work together. At Adtelli, we offer the most professional, seasoned engineers, progressive training packages and cutting-edge products that the market has to offer. Our goal is to make our vast resources readily available, no matter what you may need.

Throughout the Precision Rated Optics line of products you will find quality and affordability unmatched by other brands. With a staff of highly experienced product managers and engineers with over 50 years of field experience, we are able to deliver you the quality products that you need. We understand the growing demands of installers, technicians, plant managers, and linemen who work hard to keep the network up and running.

When you build a quality product, people notice. Anybody who works in the field knows that you have to be able to rely on your tools, because without rugged, reliable, easy-to-use tools, you don't stand a chance of meeting tight job deadlines or attaining reliable results.

Let's face it - when it has to be right, you have to work with a PRO.

Thank you for choosing our products and supporting the fiber optic industry. Together we'll get the job done.



## ***Precision Rated Optics***

***Work with a PRO!***

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## LEGAL NOTICE

Precision Rated Optics

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For purchasers with established credit, terms are net 30 days from date of shipment. Payments must be in U.S. dollars and cash discounts are not allowed. Our remit to address is Precision Rated Optics, 121 Park Avenue, Quakertown, Pennsylvania 18951.

Items being returned must first be approved and must be shipped freight prepaid. Returned goods are subject to a 25% restocking fee.

Any liability for consequential or incidental damages is expressly disclaimed. Liability is limited to, and shall not exceed, the purchase price paid.



GO-KITS



You could try to lug all this around or,

...maybe there's a simpler solution.

## Everything you need - in a backpack!

Over the past several years, fiber optic networks have seen tremendous improvements and are steadily gaining popularity as bandwidth requirements are on the rise. Using fiber offers several more advantages over the more common DSL and cable networks. Being able to provide faster speeds over longer distances is one of the most important advancements of fiber optic internet. All the major names are now in the race to provide millions of users with Gigabit fiber optic internet. If you are in a region with fiber optic networks already established, you are already in the running. Services like Google Fiber, Xfinity, Verizon FiOS and AT&T are broadening their reach and opening opportunities for those in the telecommunications industry.

If you want to work with these companies, you need to be prepared. Precision Rated Optics offers a convenient, all-in-one solution for storing and transporting your fiber optic equipment and tools. Whether you are prepping, cleaning, splicing or testing, there is a Go-Kit for every fiber optic operation. If you don't see what you need, just call and ask to build your own Go-Kit.



Create your custom Go-Kit®  
Call us at 888-545-1254





## Contractor Kit

The Contractor Go-Kit is the perfect solution for technicians that install, test, troubleshoot and restore fiber networks. Performing an OTDR test on a live fiber can damage active equipment. This kit contains a fiber identifier that will allow you to know if the fiber is live before you perform any tests. The power meter, light source and VFL are essential for basic continuity and power level checks. Also included is an inspection scope with data storage to ensure end face connectors are clean and documented. For new installations the OTDR will graph any potential issues along that fiber span. A core-alignment splicer is included to allow new fiber connections or repair fiber breaks.

<b>GOK-CON-K1</b>	Go-Kit: Contractor Kit #1	Core Alignment Splicer & OTDR 1310/1550nm 38/36dB
<b>GOK-CON-K2</b>	Go-Kit: Contractor Kit #2	Core Alignment Splicer & OTDR 1310/1550nm 40/38dB
<b>GOK-CON-K3</b>	Go-Kit: Contractor Kit #3	Active Clad.-Align. Splicer & OTDR 850/1300/1310/1550nm, 19/21/35/33dB



## Emergency Response Kit

When networks are down it costs companies tens of thousands of dollars. Getting networks back online as quickly as possible requires a highly trained technician with the proper equipment and tools. The Emergency Response Go-Kit is designed to include everything a technician needs to quickly identify the problem area (Break locator, Power Meter/Light source, VFL and fiber identifier) and then repair the break and get connections restored as quickly as possible. Also included is a variety of supplies to support field terminations and connectorization.

<b>GOK-ERK-K1</b>	Go-Kit: Emergency Response Kit #1	Active Cladding-Alignment Splicer & OTDR 1550nm, 24dB
<b>GOK-ERK-K2</b>	Go-Kit: Emergency Response Kit #2	Active Cladding-Alignment Splicer & OTDR 1310/1550nm, 24/24dB



## Fiber to the Home Kit

Both economical and fully-featured, this Go-Kit includes all of the standard fiber testing equipment, a PRO-5350 OTDR 1310/1490/1550nm 35/33/33dB, OFS-940 Series Fusion Splicer and the PON-301B Triple-Play PON Meter. Kit #1 comes equipped with the OFS-943V Active V-Groove Fusion Splicer & Kit #2 comes equipped with the OFS-945S Core-Alignment Fusion Splicer. Both splicers are compact, rugged & feature fast splice times.

<b>GOK-FTTX-K1</b>	Go-Kit: Fiber to the Home Kit #1	Active Cladding Alignment Fusion Splicer
<b>GOK-FTTX-K2</b>	Go-Kit: Emergency Response Kit #2	Core Alignment Fusion Splicer



## Data Center Kit

It's not a matter of if networks will fail, it's a matter of when. Even with careful planning and strategic design, any network is susceptible to failure. This puts technicians under a lot of pressure to meet Service Level Agreements. The Data Center Go-Kit has everything a technician needs to quickly diagnose and repair fiber optic connections. The Data Center Go-Kit is fitted with the compact OFS-947R Ribbon Fusion Splicer and the OLM-302A Optical Loss MPO Test Set. The CS-MPO Quick Click™ provides rapid cleaning of MPO transceivers and connectors. With this kit, you will be able to clean, splice and test quickly and effectively - all within the data center.

<b>GOK-DAT-K1</b>	Go-Kit: Data Center Kit #1	Ribbon Fusion Splicer
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## Outside Plant Kit

The Outside Plant Go-Kit is packed full of outside plant tools, strippers, cutters, patch cables and more. This allows technicians to greatly reduce truck rolls by always having their tools and equipment in one convenient location. With the addition of the OBL-301A Optical Break Locator, you'll be able to locate breaks quickly and easily, saving time and decreasing Mean Time to Repair (MTTR). Not to mention it's economically priced so you can get more technicians equipped and in the field all within your budget!

<b>GOK-OSP-K1</b>	Go-Kit: Outside Plant Kit #1	Mechanical Splices, OTDR 1550nm, 24dB
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## Distributed Antenna System Kit

By the year 2020, 6.1 billion people will be using a smartphone. Mobile networks are booming and so is the demand for bandwidth. To alleviate the stress on existing networks, Distributed Antenna Systems (DAS) are being installed throughout sports stadiums, event venues and other locations experiencing a large influx of mobile users, not supported by its existing network. Due to the nature of Distributed Antenna Systems, installers and technicians may need to climb towers, go up ladders, or work in difficult environments in order to perform verification testing. The convenience and portability of the DAS Go-Kit allows technicians to expedite network installation and testing.

<b>GOK-DAS-K1</b>	Go-Kit: DAS Kit #1	Power Meter, Light Source, VFL
<b>GOK-DAS-K2</b>	Go-Kit: DAS Kit #2	Power Meter, Light Source

## Go-Kit® Contents

	Part#	Description	GOK-CON-K1	GOK-CON-K2	GOK-CON-K3	GOK-ERK-K1	GOK-ERK-K2	GOK-FTTX-K1	GOK-FTTX-K2	GOK-DATA-K1	GOK-OSP-K1	GOK-DAS-K1	GOK-DAS-K2
	OFS-943V	Active Clad-Alignment Splicer				X	X	X					
	OFS-945S	Core Alignment Fusion Splicer	X	X	X				X				
	OFS-947R	Ribbon Fusion Splicer								X			
	PRO-MS-001-12	Mechanical Splice - 12 pack									X		
	FS-C81	PRO High Precision Fiber Optic Cleaver									X		
OBL/OFL/OTDR	OFT-301C	1310/1550nm, 38/36dB OTDR	X										
	PRO-5350-TS-D40	1310/1550nm, 40/38dB PM/LS/VFL OTDR		X									
	PRO-5350-TS-T35	1310/1490/1550nm, 35/33/33dB OTDR						X	X				
	PRO-5350-TS-Q21	850/1300/1310/1550nm, 19/21/35/33dB OTDR			X								
	OFL-301B	1310/1550nm, 24/24dB OFL					X						
	OBL-301A	1550nm (±20nm), 24dB OBL				X					X		
PON Meter	PON-301B	1310/1490/1550nm						X	X				
MPO OLTS	OLM-302A	OLM-302A Optical Loss MPO Test Set								X			
Light Source	LS-102D	1310/1550nm Fixed	X	X		X	X						
	LS-202X	1310/1490/1550/1625nm						X	X				
	LS-201Q	850/1300/1310/1550nm			X							X	X
Power Meter	PM-102B	-40 to +23dBm	X	X		X	X	X	X				
	PM-204B	-50 to +26dBm w/Data Storage			X							X	X
Fiber Identifier	OFI-30	-50 to +0dBm	X	X	X	X	X	X	X	X			
	OFI-30-HP	-30 to +24dBm									X		
VFL	VFL-5	PRO Mini Visual Fault Locator 1mw	X	X	X	X	X	X	X	X	X	X	
Inspection Probe	VIP-35-DATA	3.5" VIP kit w/ Data Storage	X			X	X	X	X				
	VIP-45-MPO-K1	Video Inspection Scope w/ MPO Inspect Tip								X			
	VIP-45-K1	Video Inspection Probe Kit 1		X	X							X	X
Cleaning	CS-MPO	PRO CS-MPO Quick Click™ MPO Connector								X			
	PRO-CK-CLEAN-01	PRO Cleaning kit w/Quick Clicks									X		
	CS-125	PRO CS-125 Quick Click - 1.25mm (LC)										X	X
	CS-250	PRO CS-250 Quick Click - 2.5mm SC,FC,ST										X	
	PRO-CT-001	Fiber Optic Cleaning Cassette										X	
	TC-1	SqueekeyKleen Telecom Cleaner Satur. Wipe										X	
	PRO-CT2-002-01	PRO Cleaning Stick Wrapped 2.5mm 100(P)											X
	PRO-CT2-002-02	PRO Cleaning Stick Wrapped 1.25mm 100(P)											X
	PRO-LFW-100	PRO-LFW-100 Lint-free Wipe (100ct.)											X
	PRO-CC-AQ	PRO-CC-AQ Connector Cleaner Water Base											X
Connectivity	PS-S-1KM-CUCU-1	Launch Box SM9 1KM SC/UPC-SC/UPC	X	X	X	X	X	X	X				
	PS-S-500-CACU-1	Launch Box SM9 500M SC/APC-SC/UPC									X		
	PS-M-300-CUCU-1	Launch Box MM62 300M SC/UPC-SC/UPC			X								
	UNA-FC/UPC-125U	Adapter Universal FC/UPC 2.5mm to 1.25mm									X		
	PMA-2FC-LC/PC	Adapter For OPM/OLS FC/PC - LC/PC											X
	PC-S-CLUCU01F	LC/UPC-SC/UPC PC Simplex SM9 2mm 1M										X	X
	PC-S-ACUCU01F	SC/UPC-SC/UPC PC Simplex SM9 3mm 1M										X	X
	PC-N-CLUCU01F	LC/UPC-SC/UPC PC Simplex M50 2mm 1M										X	X
	PC-N-ACUCU01F	SC/UPC-SC/UPC CA Simplex M50 3mm 1M										X	X
	PC-M-CLUCU01F	LC/UPC-SC/UPC PC Simplex MM62 2mm 1M										X	
	PC-M-ACUCU01F	SC/UPC - Simplex (62.5um) - 1 meter										X	
	CA-S-SC-S6SPZ	Mating Sleeve SC/UPC SM Simplex (Z)										X	X
	CA-S-LC-S6DPZ	Mating Sleeve LC/UPC SM Duplex (Z)										X	X
	CA-S-SC-M6SPB	Mating Sleeve SC/UPC MM Simplex (PB)										X	X
	CA-S-LC-M6DPB	Mating Sleeve LC/UPC MM Duplex (PB)										X	X
Accessories	GOK-ACC-STD	Go-Kit Standard Accessories	X	X	X	X	X	X	X	X		X	X
	GOK-ACC-OSP	Go-Kit OSP Accessories									X		

## Go-Kit Standard Accessories (GOK-ACC-STD)



GO-KITS

## Go-Kit Outside Plant Accessories (GOK-ACC-OSP)



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# PRO-790

## Fusion Splicer



SPLICERS

The PRO-790 Fusion Splicer is a rugged, compact fusion splicer that quickly splices 250 $\mu$ m, 900 $\mu$ m and 3mm fiber, as well as Splice-On Connectors.

The PRO-790 has an 8-Second splice time, 4.3" LCD touchscreen monitor and is ruggedized for heavy field use. With an onboard oven capable of accommodating Splice-On Connectors, the PRO-790 is extremely versatile.

Sold, serviced and supported in the USA, the PRO-790 comes with a 1-Year Manufacturer warranty, Splice-on-Connector holders and a carrying case.

- Simultaneous X and Y Views
- Ideal for Lateral Splicing
- PAS Technology
- 8-Second Splice Time
- Lithium Polymer Battery for Extended Run-Time

### PRO-790 Fusion Splicer Standard Package Includes:

Fusion Splicer, DC Charger, Spare Electrodes, Cooling Tray, Carry Case, Fiber Cleaver, Fiber Strippers, SOC (SC) Fiber Holder, Manual and/or Software Download Card

### Ordering Information

PRO-790	Core-Alignment Fusion Splicer w/Splice-On Connectors
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### SPECIFICATIONS

Applicable Fibers	SM, MM, DS, NZDS, G655, G657
Fiber Diameter	Cladding Diameter: 80-150 $\mu$ m; Coating Diameter: 100-1,000 $\mu$ m
Average Splice Loss	0.01db (MM), 0.02db (SM), 0.04db (DS/NZDS/G.655/G.657)
Return Loss	60dB
Tension Test	2.0N (Standard)
Splice Time	8 Seconds
Sleeve Lengths	20mm, 40mm, 60mm
Sleeve Heating Time	35 Sec.
Splicing Programs	5 groups of preset programs, 75 groups of manual settings
Alignment	Core Alignment (PAS Technology)
Splicing Method	Arc Splicing
Fiber Holder	Bare Fiber, Pigtailed, Patch Cords, Splice-on Connectors (SC)
Monitor	4.3" Color LCD Touchscreen
Interface	USB
Languages	English, Chinese, Russian, Spanish, Portuguese
Data Storage	10,000 Splice Results
Electrode Lifespan	>= 5,000
Operating Temperature	-0.4 $^{\circ}$ F ~ 122 $^{\circ}$ F (-18 $^{\circ}$ C ~ 50 $^{\circ}$ C)
Storage Temperature	-40 $^{\circ}$ F ~ 176 $^{\circ}$ F (-40 $^{\circ}$ C ~ 80 $^{\circ}$ C)
Power Supply	85 ~ 260V input Voltage 12V, 6Ah, up to 120 times continuous splice and heat
Environmental Conditions	0 ~ 95% (Humidity), 0 ~ 5000m (Altitude)
Weight & Dimensions (LxWxH)	4.8" x 4.8" x 5.1" / 4.5 lbs (122mm x 122mm x 130mm / 2.04 kg) w/Batt
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)



# OFS-935C

## Fusion Splicer



- 4.3" Touch Screen
- Waterproof, Dustproof, Anti-Shock
- SOC Compatible

### OFS-935C Series Standard Package Includes:

Splicer, Power Cord, Stripper, AC Adapter, Battery, SOC Holder, SOC Heater Block, Cooling Tray, Electrode Set, Shoulder Strap, USB Cable, User Manual, Hard Carrying Case.

### Ordering Information

OFS-935C-K1	Fusion Splicer Standard Package
OFS-935C-K2	Fusion Splicer Standard Package + Precision Cleaver
OFS-935C-K3	Fusion Splicer Standard Package + Precision Cleaver + Spare Battery + Car Charger + Spare Electrodes

The PRO OFS-935C is the perfect splicer for ANY job. This splicer has it all, from the easy-to-use touch screen interface to the rock solid core alignment splicing — all at a price that is thousands less than other comparable brands.

With an innovative design and engineered with precise manufacturing technology, the OFS-935C gives users an unmatched experience. Splice with confidence no matter what harsh environmental condition you encounter. The OFS-935C offers SOC capability, providing superior performance with reduced insertion loss and back reflection. The OFS-935C is economical, durable and backed by Precision Rated Optics service and warranty in the United States. The OFS-935C is available in three configurations, and is a perfect addition to any PRO Go-Kit!

### SPECIFICATIONS

Splicing Method	Economical & High Performance Core Alignment Splicer
Average Loss	(SM)0.02dB, (MM)0.01dB, (DS)0.04dB, (NZDS)0.04dB, (G.657)0.02dB
Return Loss	>-60dB
Splice Time	9s average SM / SM 7s Quick mode
Electrode Lifespan	>3,500 arcs
Applicable Fiber	SM(ITU-TU.652, MM(ITU-TU.651), DS(ITU-T.653), NZDS(ITU-T.655), G657A, G657B 0.25mm, 0.9mm, 2.0mm, 2.4mm, 3.0mm, FLAT(Indoor cable)
Cleaved Length	Coating Diameter< 0.25mm ~ 8-16mm, Coating Diameter> 0.25mm = 16mm minimum
Coating Diameter	100~1,000 um
Cladding Diameter	80~150um
Heating Programs	Factory installed mode: 9, User Installable mode: 23
Heating Time	Typical 18s
Protection Sleeve	40mm, 60mm, SOC Connector
Data Output	HDMI
Splice Programs	Factory Installed Mode: 33, User Installable Mode: 70+
Splice Memory	Up to 2,000 Records and 2,000 Splice Images
Battery	Typical 200 Cycles (Splice & Heat) / Single Battery
Power Supply	AC 100-240V Input or DC9-14V
Monitor	Color 4.3" LCD Monitor, with Touch Screen (Tempered Glass)
Cameras	2 CCD Camera System
Magnification	XY style: 150 Power, X/Y: 300 Power
Fiber Display	X / Y or XY, Single X.Y
Size/Weight (WxDxH)	5.47" x 4.84" x 5.11" / 3.06lb (139 x 123 x 130mm / 1.39Kg w/o Battery)
Operating Environment	Elevation: 0-5,000 Meters, Temp: -40~176°F (-40~80°C), 0-95% Relative Humidity
Wind Protection	The Max Wind Speed 15m/s
Storage Conditions	Temp: -40~176°F (-40~80°C), 0-95% Relative Humidity, Battery: -4~86°F (-20~30°C)
Pull Test	1.96~2.25N (Standard)
Warranty	Standard 1-Year Manufacturer Warranty

# OFS-936R *Ribbon Fusion Splicer*

SPLICERS



With innovative design and precise manufacturing technology, the OFS-936R gives users an unparalleled experience. Cutting-edge splicing improvements and new technology greatly reduce splicing and heating time. Its advanced estimate method and core alignment technique ensure the accuracy of splice loss estimation. Additionally, its small size, compact design and reliable protection shell make it suitable for any operating environment. A dynamic operation interface and automatic splice mode gives the user added efficiency.

- Fastest Splicing Time (15sec)
- SOC Compatible
- 4.3" Touchscreen
- Waterproof, Dustproof, Anti-Shock

### OFS-936R Standard Package Includes:

Splicer, Power Cord, Car Charger, SOC Heater Block, Shoulder Strap, Hot Jacket Stripper, Cleaver Softcase, USB Cable, Cooling Tray, SOC Holder, User Manual CD, AC Adapter for Stripper, Cleaver, AC Adapter, Spare Electrode, 2 Battery Packs, Hard Carrying Case.

### Ordering Information

OFS-936R	Ribbon Fusion Splicer
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### SPECIFICATIONS

Applicable Fiber	SMF(G.6521657), MMF(G.651), DSF(G.653), NZDSF(G.655)
Fiber Count	Single to 12 Ribbon Fiber
Cladding Diameter	Single: 125 / 160 to 3mm by Fiber Holder System Ribbon : 125 / Ribbon Fiber Thickness 0.25 to 0.4mm
Cleaved Length	13mm
Splice Mode/Heating Mode	100 Splice Modes   32 Heating Modes
Typical Splice Loss	(SM)0.03dB, (MM)0.02dB, (DS)0.08dB and (NZDS)0.08dB Measured by Cut-back Method Relevant ITU-T and IEC Standards
Splice Time	Typical 15 Sec
Tube Heating Time	Typical 20 Sec
Splice Result	Last 2000 Splices
Viewing Method	2 Axis CMOS Camera with 4.3" Color LCD
Magnification	33x and 60x Magnification
Protective Sleeve	60mm,40mm
Splice/Heating pre Battery	Typical 120 Cycles with LBT-50
Electrode Life	1500 Splices
Display	4.3" Color Super Clear Touch Screen with Temper Proof Glass
Optical System	No Mirror
Size/Weight (WxDxH)	4.88" x 4.84" x 5.43in / 4.18lb (124 x 123 x 138mm / 1.90kg)
Operating Environment	Elevation 0-5,000 Meters, Temp: 14~140°F (-10 ~ 60°C), 0-95% Relative Humidity
Storage Conditions	Temp: -40~176°F (-40~80°C), 0-95% Relative Humidity, Battery: -4~86°F (-20-30°C)
Pull Test	1.96 to 2.25N (Standard), 4,4N (Optional)
Terminals	USB 2.0 (Mini- 8 Type) Connector for PC Communication
Other Features	Remote PC Software Upgrade / Data Management / Maintenance

# OFS-960S *Fusion Splicer*



- Six Motors
- Core Alignment
- 5 Second Splice Time
- 15 Second Heating Time
- Built-in Power Meter and VFL
- Anti-theft lock
- Remote Control

## POWER METER

Wavelength (nm)	850, 1300, 1310, 1590, 1550, 1625
Measuring Range:	-70 ~ +6dB
Absolute Error	<0.3dB (-50dBm ~ +3dBm Range)

## VISUAL FAULT LOCATOR

Power	15mW, 2Hz, Flashing or Constant Light Modes
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### OFS-960S Standard Package Includes:

Fusion splicer, fiber cleaver, spare electrodes, wire stripping pliers, 3-hole stripper, hex key, carrying case, fiber for arc calibration, carrying strap, power adapter, alcohol bottle, brush, LED light

## Ordering Information

OFS-960S	Fusion Splicer
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The PRO OFS-960S Core Alignment Fusion Splicer uses the latest core alignment technology with autofocus and six motors. It is fully qualified with 100 km trunk construction, FTTH project, security monitoring, and other fiber cable splicing projects. The OFS-960S uses industrial quad-core CPU and is currently one of the fastest fiber splicing machines in the market. With 5-inch 800X480 high-resolution screen, the operation is simple and intuitive. Up to 300x focus magnification makes it very easy to observe the fiber. The OFS-960S fusion splicer features a 5-second splice time and 15 second heating time, increasing work efficiency by 50% compared to ordinary splicing machines.

## SPECIFICATIONS

Applicable Fiber	SM(ITU-T G.652&G.657) / MM(ITU-T G.651) / DS(ITU-T G.653) / NZDS(ITU-T G.655)
Fiber count	Single
Applicable fiber cables	0.25mm - 3.0mm / Indoor cable
Applicable fiber diameter	Cladding diameter: 80~150µm, Coating diameter: 125~1000µm
Fiber Holders	Multifunction holders, Applicable for SM, MM, bare fiber, pigtail, rubber-insulated, multi-fiber cable
Splice loss	SM : 0.025dB, MM : 0.01dB, DS : 0.04dB, NZDS : 0.04dB, G.657 : 0.02dB
Splice mode	Normal/high precision splicing
Internal splice data storage	Synchronize with phone for unlimited cloud storage
Splicing time	5s
Heat oven	20mm, 30mm, 40mm, 50mm, 60mm
Typical heating time	15s
Heat mode	Various heat modes available
Displaying method	Two cameras and 5.0 inch color LCD monitor
Magnification	300x for single X or Y view, or 150x for both X & Y view
Tensile test	2N
Standard AC power voltage	AC 100-240V, 50-60Hz
Standard DC power voltage	DC 13.5V/4.8A
Display	5.1 inch TFT color display
Size/Weight (WxDxH)	6.57" x 5.62" x 6.41" / 6.17lb (167 x 143 x 163mm / 2.8kg)
Operating condition	0~5000m above sea level, 0~95% relative humidity, 14~122°F (-10~50°C), 15m/s max wind speed
Storage condition	v
Battery	7800mA high-capacity lithium battery Charging time: >= 3.5 hours
Continuous Splicing/ Heating	240 times

## Precision Cleavers

### FS-C90 Series

The PRO FS-C90 Series fiber optic cleaver is easy to use and performs consistently exact cleaves. The FS-C90 Series cleaver is available in two configurations. The standard configuration is the FS-C97. The FS-C98 cleaver has automatic reset.

#### Ordering Information

FS-C97	FS-C97 High Precision Cleaver
FS-C97B	FS-C97 High Precision Cleaver with Waste Bin
FS-C98	FS-C98 High Precision Automatic Cleaver
FS-C90REPBL	FS-C90 Series Replacement blade
FS-94-TRASH-BIN	PRO OFS-940 Series Trash Bin



### FS-C81

The PRO FS-C81 is a lightweight and reliable cleaver for the construction of optical network. Designed for excellent portability, the PRO FS-C81 cleaver is ideal for FTTx applications. The 12-position blade can do 36,000 single-fiber cleaves, or 3,000 12-fiber ribbon cleaves.

#### Ordering Information

FS-C81	PRO High Precision Fiber Optic Cleaver
FS-C81-MASS	Fiber Holder for Mass Fiber
FS-C81FH	Fiber Holder for FS-C81
FS-C81REPLBL	FS-C81 Replacement Blade



### FS-C20

The PRO FS-C20 Fiber Cleaver is designed to precisely cleave all 125um multimode or singlemode optical fibers. The high precise adjustable blade can perform up to 60,000 cleaves with a typical cleave angle of 90 degree

#### Ordering Information

FS-C20	Fiber Optic Cleaver
FS-C20REPBL	FS-C20 Replacement Blade
FS-C20_GROOVE	Cleaver Groove Assembly (FS-C20)



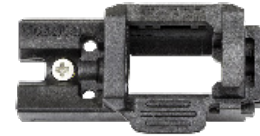
## Fiber Holders



### Ordering Information

FS-FH-94-10	PRO OFS-940 Series Fiber Holders 250um, 900um
FS-FH-94-10R	PRO OFS-947R Fiber Holders 10 Fiber (Pair)
FS-FH-94-12R	PRO OFS-947R Fiber Holders 12 Fiber (Pair)
FS-FH-94-250R	PRO OFS-947R Fiber Holders 250um Single Fiber (Pair)
FS-FH-94-2R	PRO OFS-947R Fiber Holders 2 Fiber (Pair)
FS-FH-94-40	PRO OFS-940 Series Fiber Holders 250um, 900um, 3mm Flat, Cable
FS-FH-94-4R	PRO OFS-947R Fiber Holders 4 Fiber (Pair)
FS-FH-94-6R	PRO OFS-947R Fiber Holders 6 Fiber (Pair)
FS-FH-94-8R	PRO OFS-947R Fiber Holders 8 Fiber (Pair)
FS-FH-94-900R	PRO OFS-947R Fiber Holders 900um Single Fiber (Pair)

## SOC Holders



### Ordering Information

FS-SOC-790-SC	Fiber Holder SC Splice Connector
FS-SOC-94	PRO OFS-940 Series Splice-On Connector Holder (FC/SC/ST)
FS-SOC-HB-94	PRO OFS-940 Series Splice-On Connector Heater Block (FC/SC/ST)

## Batteries



### Ordering Information

FS-BAT-790	Internal Battery for 790 Fusion Splicer
FS-BAT-941	PRO OFS-941V Replacement Battery
FS-BAT-943/945	PRO OFS-943V/945S Replacement Battery
FS-BAT-947	PRO OFS-947R/947S Replacement Battery

## Electrodes



### Ordering Information

FS-ELEC-790	PRO-790 Replacement Electrodes (Pair)
FS-ELEC-94	Spare Electrodes For OFS-940 Series Splicers
FS-ELEC-94-G	PRO OFS-940 Series Electrode Grinder

## Cooling Tray

### Ordering Information

FS-94-COOLING-TRAY	PRO OFS-940 Series Cooling Tray
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## Power

### Ordering Information

FS-94-CAR-CHARGER	OFS-940 Series Car Charger
FS-94-AC-POWER-CABLE	OFS-940 Series AC Power Cable
FS-94-AC-ADAPTER	OFS-940 Series AC-Adapter/Charger

## Splice Sleeves



### Ordering Information

PRO-SS-40	40mm Splice Sleeves
PRO-SS-40R	40mm Ribbon Splice Sleeves
PRO-SS-60	60mm Splice Sleeves

# Splice-on Connectors

PRO's Splice-on Connectors utilize a fusion splicer to terminate fiber optic connectors in the field, addressing return loss concerns present in analog optical networks. Splice-on connectors feature factory pre-polished ferrules that eliminate the need for polishing and adhesives so they can be terminated in the field reducing the potential for operator error. The splice-on connector can be used in the field of communication or even in advanced technical fields including avionics, space, military, ship-building and power plants.

SPLICE-ON CONNECTORS

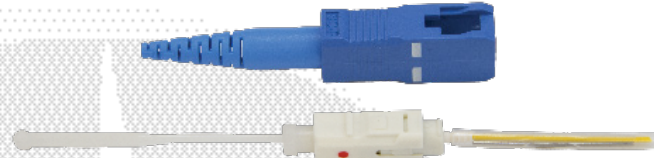
## LC SOC



### Ordering Information

LCS-SM-UPC-20	Splice-On Connector LC 2mm SM9 UPC
LCS-SM-UPC-09	Splice-On Connector LC 900um SM9 UPC
LCS-SM-APC-20	Splice-On Connector LC 2mm SM9 APC
LCS-SM-APC-09	Splice-On Connector LC 900um SM9 APC
LCS-OM3-UPC-20	Splice-On Connector LC 2mm M50 OM3 UPC
LCS-OM3-UPC-09	Splice-On Connector LC 900um M50 OM3 UPC
LCS-OM2-UPC-20	Splice-On Connector LC 2mm M50 UPC
LCS-OM2-UPC-09	Splice-On Connector LC 900um M50 UPC
LCS-OM1-UPC-20	Splice-On Connector LC 2mm M62 UPC
LCS-OM1-UPC-09	Splice-On Connector LC 900um M62 UPC

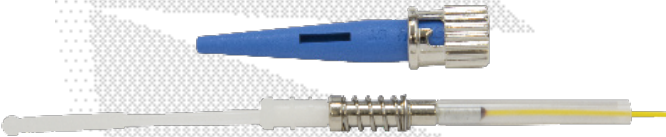
## SC SOC



### Ordering Information

SC-OM1-UPC-09	Splice-On Connector SC 900um M62 UPC
SC-OM1-UPC-2/3	Splice-On Connector SC 2/3mm M62 UPC
SC-OM1-UPC-24	Splice-On Connector SC 2.4mm M62 UPC
SC-OM2-UPC-09	Splice-On Connector SC 900um M50 UPC
SC-OM2-UPC-2/3	Splice-On Connector SC 2/3mm M50 UPC
SC-OM2-UPC-24	Splice-On Connector SC 2.4mm M50 UPC
SC-OM3-UPC-09	Splice-On Connector SC 900um M50 OM3 UPC
SC-OM3-UPC-2/3	Splice-On Connector SC 2/3mm M50 OM3 UPC
SC-OM3-UPC-24	Splice-On Connector SC 2.4mm M50 OM3 UPC
SC-SM-APC-09	Splice-On Connector SC 900um SM9 APC
SC-SM-APC-2/3	Splice-On Connector SC 2/3mm SM9 APC
SC-SM-UPC-09	Splice-On Connector SC 900um SM9 UPC
SC-SM-UPC-2/3	Splice-On Connector SC 2/3mm SM9 UPC
SC-SM-UPC-30	Splice On Connector SC 3mm SM9 UPC

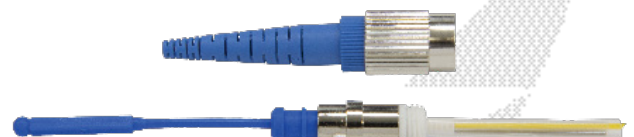
## ST SOC



### Ordering Information

ST-SM-UPC-30	Splice-On Connector ST 3mm SM9 UPC
ST-SM-UPC-09	Splice-On Connector ST 900um SM9 UPC
ST-OM3-UPC-24	Splice-On Connector ST 2.4mm M50 OM3 UPC
ST-OM3-UPC-2/3	Splice-On Connector ST 2/3mm M50 OM3 UPC
ST-OM3-UPC-09	Splice-On Connector ST 900um M50 OM3 UPC
ST-OM2-UPC-24	Splice-On Connector ST 2.4mm M50 UPC
ST-OM2-UPC-2/3	Splice-On Connector ST 2/3mm M50 UPC
ST-OM2-UPC-09	Splice-On Connector ST 900um M50 UPC
ST-OM1-UPC-24	Splice On Connector ST 2.4mm M62 UPC
ST-OM1-UPC-2/3	Splice-On Connector ST 2/3mm M62 UPC
ST-OM1-UPC-09	Splice-On Connector ST 900um M62 UPC

## FC SOC



### Ordering Information

FC-OM1-UPC-09	Splice-On Connector FC 900um M62 UPC
FC-OM1-UPC-2/3	Splice-On Connector FC 2/3mm M62 UPC
FC-OM1-UPC-24	Splice-On Connector FC 2.4mm M62 UPC
FC-OM2-UPC-09	Splice-On Connector FC 900um M62 UPC
FC-OM2-UPC-2/3	Splice-On Connector FC 2/3mm M62 UPC
FC-OM2-UPC-24	Splice-On Connector FC 2.4mm M62 UPC
FC-OM3-UPC-09	Splice-On Connector FC 900um M50 OM3 UPC
FC-OM3-UPC-2/3	Splice-On Connector FC 2/3mm M50 OM3 UPC
FC-OM3-UPC-24	Splice-On Connector FC 2.4mm M50 OM3 UPC
FC-SM-APC-09	Splice-On Connector FC 900um SM9 APC
FC-SM-APC-2/3	Splice-On Connector FC 2/3mm SM9 APC
FC-SM-UPC-09	Splice-On Connector FC 900um SM9 UPC
FC-SM-UPC-2/3	Splice-On Connector FC 2mm SM9 UPC

# Fusion Splice Packs

High quality, low loss and low reflectance connectors are essential in today's networks. The industry has evolved to a standard which only permits factory terminated "Fusion Splice Packs" or "Pigtail Packs" connectors on all Singlemode terminations. Furthermore, the benefits from low loss and reflectance also extend to Multimode fiber terminations which are increasingly moving toward 10+ GigE speeds. These advantages coupled with the increase in speed and simplification of splicing over hand terminations make the splice packs ideal in almost all instances.

## FC Splice Pack

### Ordering Information

Part Number	Connectors	Fiber Type	Cable Jacket	Cable Color	Length (m)
SPK-1FCM50	(1) FC/UPC	MM 50/125um	900um	Multi	1
SPK-1FCM62	(1) FC/UPC	MM 62.5/125um	900um	Multi	1
SPK-1FCUPC	(1) FC/UPC	SM 9/125um	900um	Multi	1
SPK-6FC-APC-SM	(6) FC/APC	SM 9/125um	900um	Multi	2
SPK-6FC-UPC-SM	(6) FC/UPC	SM 9/125um	900um	Multi	2
SPK-12FC-APC-SM	(12) FC/APC	SM 9/125um	900um	Multi	3
SPK-12FC-M5	(12) FC/UPC	SM 9/125um	900um	Multi	3
SPK-12FC-M6	(12) FC/UPC	MM 62.5/125um	900um	Multi	3
SPK-12FC-UPC-SM	(12) FC/UPC	SM 9/125um	900um	Multi	3

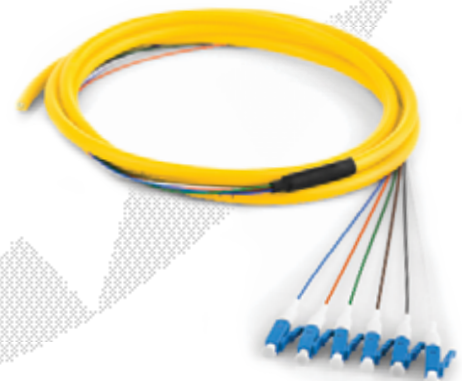


SPLICE PACKS

## LC Splice Pack

### Ordering Information

Part Number	Connectors	Fiber Type	Cable Jacket	Cable Color	Length (m)
SPK-1LCAPC	(1) LC/APC	SM 9/125um	900um	Multi	1
SPK-1LCM50	(1) LC/UPC	MM 50/125um	900um	Multi	1
SPK-1LCM62	(1) LC/UPC	MM 62.5/125um	900um	Multi	1
SPK-1LC-OM3	(1) LC/UPC	MM OM3	900um	Multi	1
SPK-1LCUPC	(1) LC/UPC	SM 9/125um	900um	Multi	1
SPK-6LC-APC-SM	(6) LC/APC	SM 9/125um	900um	Multi	2
SPK-6LC-M5	(6) LC/UPC	MM 50/125um	900um	Multi	2
SPK-6LC-M6	(6) LC/UPC	MM 62.5/125um	900um	Multi	2
SPK-6LC-OM3	(6) LC/UPC	MM OM3	900um	Multi	2
SPK-6LC-UPC-SM	(6) LC/UPC	SM 9/125um	900um	Multi	2
SPK-12LC-APC-SM	(12) LC/APC	SM 9/125um	900um	Multi	3
SPK-12LC-M5	(12) LC/UPC	MM 50/125um	900um	Multi	3
SPK-12LC-M6	(12) LC/UPC	MM 62.5/125um	900um	Multi	3
SPK-12LC-OM3	(12) LC/UPC	MM OM3	900um	Multi	3
SPK-12LC-OM4	(12) LC/UPC	MM OM4	900um	Multi	3
SPK-12LC-UPC-SM	(12) LC/UPC	SM 9/125um	900um	Multi	3

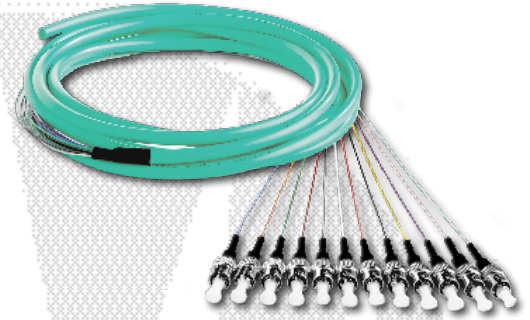


# Fusion Splice Packs

## ST Splice Pack

### Ordering Information

Part Number	Connectors	Fiber Type	Cable Jacket	Cable Color	Length (m)
SPK-1STUPC	(1) ST/UPC	SM 9/125um	900um	Multi	1
SPK-1STM50	(1) ST/UPC	MM 50/125um	900um	Multi	1
SPK-1STM62	(1) ST/UPC	MM 62.5/125um	900um	Multi	1
SPK-6ST-M5	(6) ST/UPC	MM 50/125um	900um	Multi	2
SPK-6ST-M6	(6) ST/UPC	MM 62.5/125um	900um	Multi	2
SPK-6ST-OM3	(6) ST/UPC	MM OM3	900um	Multi	2
SPK-12ST-APC-SM	(12) ST/APC	SM 9/125um	900um	Multi	3
SPK-12ST-UPC-SM	(12) ST/UPC	SM 9/125um	900um	Multi	3
SPK-12ST-M5	(12) ST/UPC	MM 50/125um	900um	Multi	3
SPK-12ST-M6	(12) ST/UPC	MM 62.5/125um	900um	Multi	3
SPK-12ST-OM3	(12) ST/UPC	MM OM3	900um	Multi	3
SPK-12ST-OM4	(12) ST/UPC	MM OM4	900um	Multi	3

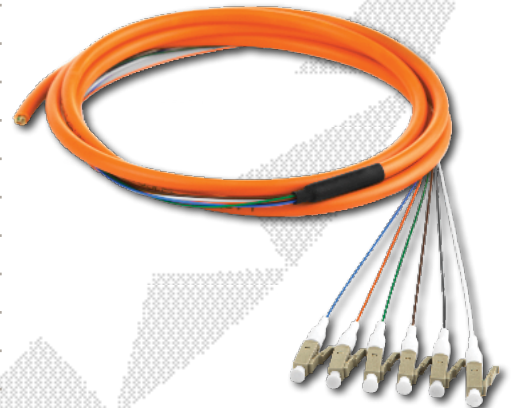


SPLICE PACKS

## SC Splice Pack

### Ordering Information

Part Number	Connectors	Fiber Type	Cable Jacket	Cable Color	Length (m)
SPK-1SCAPC	(1) SC/APC	SM 9/125um	900um	Multi	1
SPK-1SCUPC	(1) SC/UPC	SM 9/125um	900um	Multi	1
SPK-1SCM50	(1) SC/UPC	MM 50/125um	900um	Multi	1
SPK-1SCM62-BE	(1) SC/UPC	MM 62.5/125um	900um	BE	1
SPK-1SCM62-OR	(1) SC/UPC	MM 62.5/125um	900um	OR	1
SPK-1SCM62-RO	(1) SC/UPC	MM 62.5/125um	900um	RO	1
SPK-1SCM62-SL	(1) SC/UPC	MM 62.5/125um	900um	SL	1
SPK-1SCM62-WH	(1) SC/UPC	MM 62.5/125um	900um	WH	1
SPK-1SCM62-YE	(1) SC/UPC	MM 62.5/125um	900um	YE	1
SPK-6SC-APC-SM	(6) SC/APC	SM 9/125um	900um	Multi	2
SPK-6SC-UPC-SM	(6) SC/UPC	SM 9/125um	900um	Multi	2
SPK-6SC-M5	(6) SC/UPC	MM 50/125um	900um	Multi	2
SPK-6SC-M6	(6) SC/UPC	MM 62.5/125um	900um	Multi	2
SPK-6SC-OM3	(6) SC/UPC	MM OM3	900um	Multi	2
SPK-6SC-OM4	(6) SC/UPC	MM OM4	900um	Multi	2
SPK-12SC-APC-SM	(12) SC/APC	SM 9/125um	900um	Multi	3
SPK-12SC-UPC-SM	(12) SC/UPC	SM 9/125um	900um	Multi	3
SPK-12SC-M5	(12) SC/UPC	MM 50/125um	900um	Multi	3
SPK-12SC-M6	(12) SC/UPC	MM 62.5/125um	900um	Multi	3
SPK-12SC-OM3	(12) SC/UPC	MM OM3	900um	Multi	3
SPK-12SC-OM4	(12) SC/UPC	MM OM4	900um	Multi	3





# Splicer Comparison Sheet

COMPARISONS

Description	PRO-790	OFS-941V	OFS-943V	OFS-945S	OFS-947S	OFS-947R
<b>Applicable Fibers</b>	SM, MM, DS, NZ-DS(G655), G655,G657 and others	SM(ITU-T G.652&G.657) / MM(ITU-T G.651) / DS(ITU-T G.653) / NZDS(ITU-T G.655)	SM(ITU-T G.652&G.657) / MM(ITU-T G.651) / DS(ITU-T G.653) / NZDS(ITU-T G.655)	SM(ITU-T G.652&G.657) / MM(ITU-T G.651) / DS(ITU-T G.653) / NZDS(ITU-T G.655)	SM(ITU-T G.652&G.657) / MM(ITU-T G.651) / DS(ITU-T G.653) / NZDS(ITU-T G.655)	Ribbon: 0.25~0.4mm / Single : 250 um & 900 um
<b>Average Splice Loss (dB)</b>	SM: 0.02dB MM: 0.01dB DS/NZDS/ G.655/G.657: 0.05dB	SM: 0.03dB MM: 0.02dB DS: 0.05dB NZDS: 0.05dB G.657: 0.03dB	SM: 0.03dB MM: 0.02dB DS: 0.05dB NZDS: 0.05dB G.657: 0.03dB	SM: 0.02dB, MM: 0.01dB DS: 0.04dB NZDS: 0.04dB G.657 : 0.02dB	SM : 0.02dB MM : 0.01dB DS : 0.04dB NZDS : 0.04dB G.657 : 0.02dB	SM: 0.05dB MM: 0.02dB DS: 0.08dB NZDS: 0.08dB (ITU-T Standard)
<b>Splice Time</b>	8 Seconds	SM mode: 9s Quick mode: 7s	SM mode: 9s Quick mode: 7s	Auto mode: 9s Quick mode: 7s	Auto mode: 8s Quick mode: 7s	Ribbon fiber: 15 Sec / Single fiber: 9 Sec
<b>Heater Time</b>	Typical 35 Seconds	Typical 13 Seconds	Typical 30 Sec	Typical 13 Seconds	Typical 13 Seconds	Typical 20 Sec
<b>Splicing Method</b>	Core Alignment	Active V-Groove Clad Alignment	Active V-Groove Clad Alignment	Core Alignment	Core Alignment	V-Groove / Ribbon
<b>Cladding Diameter</b>	80 ~ 150 um	80 ~ 150 um	80 ~ 150 um	80 ~ 150 um	80 ~ 150 um	125 um
<b>Monitor</b>	3.5" Color LCD, 200x	4.3" Color LCD Touch Screen	5" Color LCD Touch Screen	5" Color LCD Touch Screen	5" Color LCD Touch Screen	5" Color LCD Touch Screen
<b>Data Storage</b>	10000 Splice Records	2000 Splice Records	2000 Splice Records	2000 Splice Records	2000 Splice Records	2000 Splice Records

# PRO-5350 Series

## OTDR



OTDRS

- IP65 Waterproof Rating
- 7" TFT, Color Touchscreen Display
- Built-in VFL
- Built-in Power Meter
- Built-in Light Source
- User-Friendly Interface

### Available Options

- SC or ST Adapters
- Video Inspection Probe

### PRO-5350 Series Standard Package Includes:

OTDR, 12V Power Adapter, Lithium Battery, FC Adapter, USB Cord, Manual and/or Software Download Card, Carrying Case

### Ordering Information

PRO-5350-TS-D26	PRO-5350 OTDR SM, 26/24dB
PRO-5350-TS-D32	PRO-5350 OTDR SM, 32/30dB
PRO-5350-TS-D35	PRO-5350 OTDR SM, 35/33dB
PRO-5350-TS-D40	PRO-5350 OTDR SM, 40/38dB
PRO-5350-TS-D43	PRO-5350 OTDR SM, 43/41dB
PRO-5350-TS-M21	PRO-5350 OTDR MM, 19/21dB
PRO-5350-TS-Q21	PRO-5350 OTDR SM/MM, 19/21/35/33dB
PRO-5350-TS-Q22	PRO-5350 OTDR SM/MM, 19/21/40/38dB
PRO-5350-TS-T40	PRO-5350 OTDR SM, 40/38/38dB
PRO-5350-TS-T43	PRO-5350 OTDR SM, 43/40/40dB

The PRO-5350 Series OTDR is the new generation of intelligent OTDRs for use in fiber communications systems. With an increase in optical network construction in cities and suburbs, there is often a need for higher power OTDRs. The PRO-5350 is specifically designed for such applications.

The PRO-5350 Series is manufactured within precise engineering and design tolerances, keeping usability, durability and expandability in mind. Subject to stringent mechanical, electronic and optical testing, quality can be seen and felt from the ruggedized body and high resolution display, to the soft-touch keypad and user-friendly USB interface.

The PRO-5350 Series OTDR comes standard with a **VFL, Power Meter, Light Source and Touchscreen**. Sold, serviced and supported in the USA, the PRO-5350 comes with a standard 3-year manufacturer's warranty and carrying case.

### SPECIFICATIONS

Pulse Width	3-20Kns
Operational Wavelength	1310/1550 (Standard*)
Dynamic Range	32/30dB (Standard*)
Full-Distance Accuracy	240Km
Sampling Resolution	Minimum 0.25m
Sampling Points	Maximum 128,000 Points
Linearity	≤ 0.05dB/dB
Loss Threshold	0.01dB
Loss Resolution	0.001dB
Distance Resolution	0.01m
Distance Accuracy	± (1m+Measuring Distance × 3 × 10 <sup>-5</sup> + Sampling Resolution)
Internal Visual Source	10mW, CW/2Hz   VFL -5dBm
Data Storage	40,000 Groups of Curves
Interface	RJ-45 Port(x1); USB (x3) Type "A" (x2), Type "B" (x1)
Display	7" TFT-LCD Touchscreen
Battery	7.4V/4.4Ah Lithium Battery (with Aviation Certification), Battery Capacity: 12 Hours
Operating Temp.	14° F ~ 122° F (-10° C ~ 50° C)
Storage Temp.	-4° F ~ 158° F (-20° C ~ 70° C)
Environmental Conditions	0 ~ 95% RH (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	9.9" x 6.6" x 2.9" / 1.5 lb (253 x 168 x 73.5mm / 1.5kg) (Battery Included)
Warranty	Standard 3-Year Manufacturer Warranty

\*Standard - See [Ordering Information](#) for other available options

# PRO-6350 Series *OTDR*



The PRO-6350 Series is a compact multi-functional platform, specially designed for FTTx/WAN applications and can meet all test requirements of installers, contractors and service operators during network installation, construction, maintenance and troubleshooting. It is convenient and accurate for auto/manual testing, multi-wavelength testing and multifunctional analysis.

- 7" TFT, Color Touchscreen Display
- Flexible File Naming
- Auto/Manual Test and Analysis
- High Dynamic Range up to 50dB
- LAN/WAN/FTTx Application

## SPECIFICATIONS

Display	7" TFT-LCD Touchscreen
Connectivity	USBx2; 10/100Mbit/s RJ-45x1
Memory	2GB
Power Supply	Rechargeable Li-Ion Battery/AC Adapter
Battery Life	10 hours continuous operation
Operating Temp.	-4° F ~ 122° F (-20° C ~ 50° C)
Storage Temp.	-40° F ~ 140° F (-40° C ~ 60° C)
Environmental Conditions	0 ~ 95% RH (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	11.4" x 6.8" x 2.9" / 4.6 lb (290 x 175 x 75mm / 2.1kg) (Battery Included)

## OTDR with VFL

Selectable Range	SM: 1.3, 2.5, 5, 10, 20, 40, 80, 160, 240Km MM: 1.3, 2.5, 5, 10, 20, 40Km
Pulse Width	SM: 5ns, 10ns, 30ns, 100ns, 300ns, 1µs, 2.5µs, 10µs, 20µs MM: 5ns, 10ns, 30ns, 1µs, 2.5µs
Visual Light Source	Output Power: ≥ -3dBm; MOD Frequency: 1 Hz; Detection Range: 5Km
Event Dead Zone (m)	0.8
Attenuation Dead Zone (m)	4.5

## Optical Power Meter

CAL Wavelength	850, 1300, 1310, 1490, 1550, 1625, 1650nm (±20nm)
Power Range (dBm)	-70 ~ +6 (-60 ~ +6 @ 850nm)
Accuracy	± 5% ±0.01nW (±0.5dB@850nm)
Detector Type	InGaAs
MOD Identification	270, 1K, 2K Hz
Resolution	0.01dB
Connectors	FC (Interchangeable SC, ST and LC)

## Stabilized Light Source

Wavelengths	Same as OTDR's
Emitter Types	FP-LD@1310, 1490, 1550nm; DFB-LD@1625nm
Output Mode	CW, 270Hz, 1KHZ, 2KHz
Spectrum Width	≤ 5nm
Output Power	≥ -7dBm
Power Stability	± 0.05dB/15min; ± 0.10dB/8hr
Connectors	FC/UPC (Interchangeable SC, ST)

## Video Inspection Probe

Field of View	400µm x 300µm
Resolution	≤ 1.5µm
Focusing	Manual Focus
Hand-Probe Dimensions	ø32mm x 175mm

## Ordering Information

PRO-6350-TS-D38	Mini OTDR 1310/1550nm 38/37dB
PRO-6350-TS-D45	Long-haul OTDR 1310/1550nm 45/43dB
PRO-6350-TS-D50	Extra Long-haul OTDR
PRO-6350-TS-T38	Three-wavelength OTDR
PRO-6350-TS-T41	Three-wavelength OTDR (1625nm on-line test & PON network)
PRO-6350-TS-T40	Three-wavelength OTDR (1650nm on-line test & PON network)
PRO-6350-TS-Q23	SM & MM OTDR

### PRO-6350 Series Standard Package Includes:

OTDR, Lithium Battery, Manual and/or Software Download Card, Data Cable, Carrying Case, Warranty card, Calibration Certificate

# OFT-301 Series *Handheld OTDR*

OTDRs



The OFT-301 Series OTDR is a high-performance, easy-to-use diagnostic tool designed for fiber maintenance, locating faults and general troubleshooting. The OFT-301 Series OTDR offers the same functionality as a high-end OTDR at a fraction of the cost.

Up to 1,000 test results can be stored onboard and later transferred to a PC, via a built-in USB port. The onscreen interface has been engineered for ease of use and utilizes convenient "Hot Keys" for quick, simple testing.

Water, shock and dustproof, the OFT-301 Series OTDR is reliable and built to last. The unit will operate for up to 10 hours on the included NiMH rechargeable battery and includes an AC/DC adapter. The OFT-301 is well-suited for inside plant, outside plant and FTTx applications.

- High-Definition Graphical Interface
- "Hot Keys" and One-Button Testing
- Water, Dust and Shock-Proof
- Stores 1,000 Records
- 10 Hours Continuous Operation

## SPECIFICATIONS

	OFT-301B	OFT-301C	OFT-301-MM	OFT-301-QUAD
Dynamic Range	28/28dB	38/36dB	21/24dB	21/24/32/30db
Fiber Type / Wavelength	1310/1550nm		850/1300nm	850/1300/1310/1550nm
Event Dead Zone	2.5m		1.5m	1.5m
Attenuation Dead Zone	8m		5m	4.5m
Connector	FC/UPC (Interchangeable SC, ST)			
Distance Accuracy	$\pm (1m + 5 \times 10^{-5} \times \text{Distance} + \text{Sampling Space})$			
Data Storage	1,000 Results			
Communication Ports	RS-232/USB			
Power Supply	NiMH Rechargeable Battery / AC Adapter			
Battery Life	10 hrs continuous operation, 20 hrs standby (on one charge)			
Warranty	1-Year Manufacturer's Warranty			
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)			
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)			
Environmental Conditions	0 ~ 95% RH (Humidity, Non-Condensing)			
Weight & Dimensions (HxWxD)	(8.7" x 4.3" x 2.7" / 2.2 lb (220 x 110 x 70mm / 1kg)			
Warranty	Standard 1-Year Manufacturer Warranty			

### OFT-301 Series Standard Package Includes:

OTDR, Rechargeable Battery, AC/DC Adapter, Manual and/or Software Download Card, Data Transfer Cable (RS232/USB), Rubber Boot, Warranty Card, CE Certificate, Certificate of Calibration, Quick-Reference Guide, Soft Carrying Case

### Ordering Information\*

<b>OFT-301B</b>	Handheld OTDR 1310/1550nm 28/28dB
<b>OFT-301C</b>	Handheld OTDR 1310/1550nm 38/36dB
<b>OFT-301-MM</b>	Handheld OTDR 850/1300nm 21/24dB
<b>OFT-301-QUAD</b>	Handheld OTDR 850/1300/1310/1550nm 24/24/32/30dB

\* Additional models available with light source, power meter and VFL options

# OFT-CWDM Series

## 4 Channel CWDM OTDR



Manufactured in the USA, the OFT-CWDM-SB and OFT-CWDM-LB are ruggedized, compact OTDRs that are available in a variety of wavelengths, with up to four wavelengths per unit. The standard wavelengths are: 1471, 1491, 1511, 1531nm (SB) and 1551, 1571, 1591, 1611nm (LB). Other wavelength combinations are available upon request.

The OFT-CWDM Series is water, dust and shock resistant, has onboard storage for 500 traces, video inspection capability and a USB port for easy data transfer.

Manufactured, sold, serviced and supported in the USA, the OFT-CWDM Series comes standard with FC/ST and SC connectors, Telcordia software and a 1-year manufacturer's warranty.

- Manufactured in the USA
- Water, Dust and Shock Resistant
- 32 dB Dynamic Range
- Video Inspection Capability
- USB Flash Drive Port and Mini USB/PC Port

### Power Meter

Detector Type	InGaAs
Connector Types	FC, ST and SC
Dynamic Range	+5 ~ -77dB (CATV: +25 ~ -57dB)
Calibrated Wavelengths	850 ~ 1625 nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Accuracy	± 0.18 dB under reference conditions, ± 0.25 dB from 0 ~ -65 dBm ± 0.35 dB from 0 ~ +5 dBm and from -65 ~ -77 dBm
Power input Range	+5 ~ -77dBm

### Light Source

Fiber Type	Singlemode
Wavelengths	1471/1491/1511/1531nm ±3nm or 1551/1571/1591/1611nm ±3nm
Output Power	0 dBm (-3dBm @ 1625nm)
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	CW, 270 Hz, 1,000 Hz, 2000 Hz

### Visual Fault Locator

Emitter Type	Laser
Wavelength	650nm ±5nm
Laser Safety Class	Class II/FDA21 CFR1040.10 & 1040.11 IEC 825-1: 1993
Connector Type	2.5mm Universal
Output Power	1mW Max.

### OFT-CWDM Series Standard Package Includes:

Universal AC/DC Power Adapter/Charger w/US, UK, Continental Europe, and Australian Plugs, Interchangeable FC, ST and SC Adapters, Manual and/or Software Download Card, Soft Carrying Case

### SPECIFICATIONS

Item / Model No.	OFT-CWDM-SB	OFT-CWDM-LB
Wavelength Range	1471/1491/1511/ 1531nm (±3nm)	1551/1571/1591/ 1611nm (±3nm)
Dynamic Range	32dB	
Pulse Width	5 to 20,000 ns	
Units of Measurement	km, kf, mi	
Event Dead Zone	1m	
Attenuation Dead Zone	4m	
Resolution	.125 ~ 32m	
Full Scale Distance Range	1-64km (MM), 1-240km (SM)	
Typical Real-time Refresh Rate	2 Hz	
Group Index of Refraction (GIR)	1.024 ~ 2.048	
Linearity	± .05 dB/dB	
Memory Capacity	500 Traces	
Power Supply	Universal AC/DC / Charger	
Battery	Rechargeable NiMH (>8 hrs. Operating Time)	
Battery Capacity	>8 hrs	
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)	
Storage Temperature	-4° F ~ 140° F (-20° C ~ 60° C)	
Weight	2 lb (907 g)	
Warranty	Standard 1-Year Manufacturer Warranty	

### Ordering Information

OFT-CWDM-SB	1471, 1491, 1511, 1531nm CWDM Wavelengths
OFT-CWDM-LB	1551, 1571, 1591, 1611nm CWDM Wavelengths

CWDM OTDR

# Pulse Suppressor

AKA "Launch Boxes"



«Rugged Case

PULSE SUPPRESSOR



Shoulder Pouch »

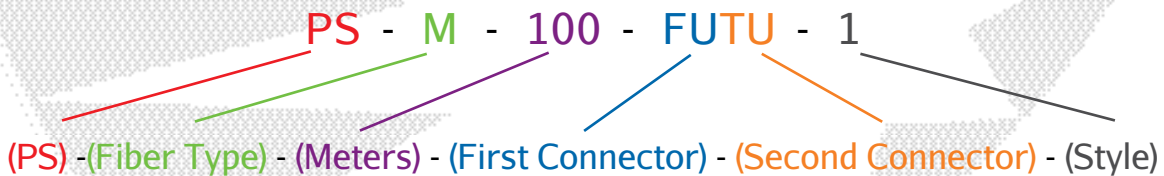
Used in conjunction with an OTDR, the Fiber Optic Pulse Suppressors (AKA "Launch Boxes") eliminate Dead Zones. Dead Zones occur after a reflective event.

The first reflective event (where the OTDR plugs into the bulkhead) will have a 2-5 meter Dead Zone, making it impossible to measure loss from 2-5 meters beyond the event.

The use of a pulse suppressor effectively moves the Dead Zone away from crucial connections and splice points, providing your trace with accurate test results in areas where loss must be calculated. Also, having a second pulse suppressor at the end of the cable under test will enable the OTDR to compare back scatter levels before and after the last reflective event.

- Eliminate Dead Zones for Front and Back-End Testing
- Rugged Weatherproof Case or Shoulder Pouch
- Corning Fiber Optic Cable
- Reduce Wear and Tear on OTDR Connectors
- Improves EMD in Multimode Fibers for More Precise Measurements

## How to Configure Your Part Number:



Pulse Suppressor	Fiber Type	Fiber Length (Meters)	First Connector	Second Connector	Body Style
PS	Single (S) 9/125	100	FU (UPC) FA (APC)	FU (UPC) FA (APC)	1: ≤ 1K
PS	Multi-Mode (M) 625/125	300	CU (UPC) CA (APC)	CU (UPC) CA (APC)	2: > 1K ≤ 3K
PS	Multi-Mode (N) 50/125	500	TU (UPC)	TU (UPC)	B: Shoulder Pouch
PS	Multi-Mode (L) OM3	1K	LU (UPC) LA (APC)	LU (UPC) LA (APC)	
PS	Multi-Mode (R) OM4	2K			

## OBL-301A

### Optical Break Locator



The OBL-301A is a high-performance, easy-to-use diagnostic tool designed for fiber maintenance, locating faults and general troubleshooting. The OBL-301A utilizes much of the same technology used in an OTDR, such as a graphical representation of the fault location, but at a much lower price point than an OTDR.

Up to 1,000 test results can be stored onboard and later transferred to a PC, via a built-in USB port. The onscreen interface has been engineered for ease of use and utilizes convenient "Hot Keys" for quick, simple testing.

Water, shock and dust proof, the OBL-301A is reliable and built to last. The unit will operate for up to 8 hours on the included NiMH rechargeable battery and includes an AC/DC adapter. Sold, serviced and supported in the USA, the OBL-301A is a workhorse, well-suited for inside plant, outside plant and FTTx applications.

- Quick One-Button Fault Detection and Diagnosis
- High-Definition Graphical Interface
- "Hot Keys" and One-Button Testing
- Water, Dust and Shock-Proof
- Sold, Serviced and Supported in the USA
- 1 Year Warranty

#### OBL-301A Standard Package Includes:

OBL, Rechargeable Battery, AC/DC Adapter, Manual and/or Software Download Card, Data Transfer Cable (RS232/USB), Rubber Boot, Warranty Card, CE Certificate, Certificate of Calibration, Quick-Reference Guide, Soft Carrying Case

#### Ordering Information

OBL-301A	Optical Break Locator
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#### SPECIFICATIONS

Fiber Type / Wavelength	1550nm (±20nm)
Dynamic Range	24 dB
Pulse Width	5ns, 10ns, 30ns, 100ns, 300ns, 1µs, 2.5µs, 10µs, 20µs
Event Dead Zone	3.5m
Attenuation Dead Zone	13m
Range of Use	Singlemode Fiber
Emitter Type	LD
Connector	SC/UPC (Interchangeable FC, ST)
Distance Accuracy	± (1m + 5 x 10 <sup>-5</sup> x Distance + Sampling Space)
Data Storage	1,000 Results
Communication Ports	USB
Power Supply	NiMH Rechargeable Battery / AC Adapter
Battery Life	8 hrs continuous operation, 20 hrs standby (on one charge); recharging time < 4 hrs
Operating Temperature	-4° F ~ 122° F (-20° C ~ 50° C)
Storage Temperature	-40° F ~ 158° F (-40° C ~ 70° C)
Environmental Conditions	0 ~ 95% RH (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	(8.7" x 4.3" x 2.7" / 2.2 lb (220 x 110 x 70mm / 1kg)

# OFL-301B

## Optical Fault Locator

OPTICAL FAULT LOCATORS



The OFL-301B is a high-performance, easy-to-use diagnostic tool designed for fiber maintenance, locating faults and general troubleshooting. The OFL-301B utilizes much of the same technology used in an OTDR, such as a graphical representation of the fault location, but at a much lower price point than an OTDR.

Up to 1,000 test results can be stored onboard and later transferred to a PC, via a built-in USB port. The onscreen interface has been engineered for ease of use and utilizes convenient "Hot Keys" for quick, simple testing.

Water, shock and dustproof, the OFL-301B is reliable and built to last. The unit will operate for up to 8 hours on the included NiMH rechargeable battery and includes an AC/DC adapter. Sold, serviced and supported in the USA, the OFL-301B is a workhorse, well-suited for inside plant, outside plant and FTTx applications.

- Quick One-Button Fault Detection and Diagnosis
- High-Definition Graphical Interface
- "Hot Keys" and One-Button Testing
- Water, Dust and Shock-Proof
- Sold, Serviced and Supported in the USA
- 1 Year Warranty

### OFL-301B Standard Package Includes:

OFL, Rechargeable Battery, AC/DC Adapter, Manual and/or Software Download Card, Data Transfer Cable (RS232/USB), Rubber Boot, Warranty Card, CE Certificate, Certificate of Calibration, Quick-Reference Guide, Soft Carrying Case

### Ordering Information

OFL-301B	Optical Fault Locator
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### SPECIFICATIONS

Fiber Type / Wavelength	1310/1550nm (±20nm)
Dynamic Range	30/30dB
Pulse Width	5ns, 10ns, 30ns, 100ns, 300ns, 1µs, 2.5µs, 10µs, 20µs
Event Dead Zone	3.5m
Attenuation Dead Zone	13m
Range of Use	Singlemode Fiber
Emitter Type	LD
Connector	SC/UPC (Interchangeable FC, ST)
Distance Accuracy	± (1m + 5 × 10 <sup>-5</sup> × Distance + Sampling Space)
Data Storage	1,000 Results
Communication Ports	USB
Power Supply	NiMH Rechargeable Battery / AC Adapter
Battery Life	8 hrs continuous operation, 20 hrs standby (on one charge); recharging time < 4 hrs
Operating Temperature	-4° F ~ 122° F (-20° C ~ 50° C)
Storage Temperature	-40° F ~ 158° F (-40° C ~ 70° C)
Environmental Conditions	0 ~ 95% RH (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	(8.7" x 4.3" x 2.7" / 2.2 lb (220 x 110 x 70mm / 1kg)
Warranty	Standard 1-Year Manufacturer Warranty



# OCC-CWDM-201A-10

## CWDM/10CH Analyzer



The OCC-CWDM-201A-10 handheld, CWDM 10-Channel Analyzer is specially designed for CWDM installation, maintenance and troubleshooting.

The OCC-CWDM-201A-10 handheld, CWDM 10-Channel Analyzer simultaneously measures 10 CWDM channels in the 1431-1611nm range, and can also function as a power meter. The user can choose between "Histogram" and "List Data" modes.

The OCC-CWDM-201A-10 can replace high-cost spectrometers and conduct quick, reliable measurements in any work environment. The compact, ruggedized design is backed by a 3-year manufacturer's warranty and includes data management software and a carrying case.

- 10 Channel Wavelength Testing: 1431nm ~ 1611nm
- Compact, Ruggedized Design
- "Histogram" and "List Data" Display Modes
- Can Also Function as a Power Meter
- Data Transfer via USB

### Three Modes of Operation:

#### Histogram Mode

- X Axis: Channels 1~10 from 1431nm ~ 1611nm.
- Y Axis: Value (dBm).

#### List Mode

- 10-Channel List
- Units of Measurement: mW/uW/dBm/dB (REF)
- **RED** Indicate Failure

#### General Power Meter mode

- Six Wavelengths: 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm
- Units of Measurement: mW/uW/nW/dBm/dB (REF)

### OCC-CWDM-201A-10 Standard Package Includes:

CWDM Analyzer, NiMH Battery, AC Adapter, USB Cable, Manual and/or Software Download Card, Calibration Certification, Carrying Case

### Ordering Information

OCC-CWDM-201A-10	10 Channel CWDM Analyzer
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### SPECIFICATIONS

Wavelength (nm)	1431 ~ 1611
Power Range (dBm)	-40 ~ +10
Channel Number	10
Channel Spacing	20nm
Central Wavelength	ITU
Channel Band-pass	ITU ±6.5nm
Channel Power Resolution	±0.01 dB
Channel Power Accuracy	±0.5 dB
Maximum Input Power	13 dBm
Return Loss	>45 dB
Close Channels Insulation	≥25 dB
Non=close Channels Insulation	≥30 dB
Units of Measurement	mW/uW/dB (REF)
Data Storage	1,000 Operations
Connector	FC/PC (Interchangeable SC, ST)
Warranty	Standard 3-Year Manufacturer Warranty

### Power Meter

Calibrated Wavelengths (nm)	850, 1300, 1310, 1490, 1550, 1625nm
Power Range (dBm)	-60 ~ +10
Unit	mW/uW/nW/dBm/dB (REF)
Resolution	±0.25 dB (5%) @ 25°C

### General

Power Supply	NiMH Rechargeable Battery / AC Adapter
Battery Capacity	Continuous Operation ≥10 Hours
Operating Temperature	32°F ~ 122°F (0°C ~ 50°C)
Environmental Conditions	0 ~ 95% (Humidity)
Weight & Dimensions (HxWxD)	7.5" x 4" x 2" / 1.5 lb (191 x 102 x 51 mm / 680 g)

# OCC-CWDM-301 Series

## CWDM/ 8CH & 18CH Analyzers

CHANNEL ANALYZER



The OCC-CWDM-301 Series Handheld CWDM Optical Channel Checker is specially designed for CWDM installation, maintenance and troubleshooting. This unit is able to measure and monitor power values of up to 18 CWDM channels. The OCC-CWDM-301 Series can replace high-cost spectrometers and conduct quick and reliable measurements in all environments.

Due to its light, compact and sturdy design, the OCC-CWDM-301 Series is the ideal tool for CWDM installation and maintenance technicians.

- Up to 18-channel Measurement
- Results Displayed in Histogram and List
- User-defined Threshold Settings
- Data Transfer to PC via USB
- 10 Hours Continuous Operation

### Power Meter Module

Calibrated Wavelength (nm)	850, 1300, 1310, 1490, 1550, 1625
Power Range (dBm) <sup>(1)</sup>	-70 ~ +10
Accuracy	±5%±0.01nW (±0.5 dB@850nm)
Resolution	0.01 dB

### General Specifications

Power Supply	NiMH Rechargeable Battery / AC Adapter
Battery Life	10 hrs continuous operation, 20 hrs standby (on one charge)
Warranty	1-Year Manufacturer's Warranty
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)
Storage Temperature	-4° F ~ 158° F (-20° C ~ 70° C)
Environmental Conditions	0 ~ 95% RH (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	(8.7" x 4.3" x 2.7" / 2.2 lb (220 x 110 x 70mm / 1kg)

**Note:** (1) At 850nm, the lower limit of measurement range is -60 dBm

\* Specifications subject to change without notice

#### OCC-CWDM-301 Series Standard Package Includes:

CWDM Optical Channel Checker, Rechargeable Battery, AC/DC Adapter, Manual and/or Software Download Card, Data Transfer Cable (RS232/USB), User's Guide, Warranty Card, CE Certificate, Certificate of Calibration, Soft Carrying Case

### CWDM Module

	OCC-CWDM-301-18A	OCC-CWDM-301-18B
Wavelength (nm)	1471~1611	1271~1611
Channel Number	8	18
Power Range	-50 ~ +10dBm	
Channel Spacing	20nm	
Central Wavelength	ITU	
Channel Band-pass	ITU ±6.5nm	
Channel Power Resolution	±0.01 dB	
Channel Power Accuracy	±0.5 dB	
Channel Power Repeatability	±0.5dB	
Maximum Input Power	13 dBm	
ORL	>45 dB	
Measurement Unit	W/mW/ μW/nW/pW/dBm/dB (REF)	
Data Storage	1000 sets	
Connectivity	USB	
Detector Type	InGaAs	
Application Range	Singlemode Fiber	
Connector	FC/PC (Interchangeable SC/ST)	
Power Saving	Auto-off after 5 minute idle	

### Ordering Information

OCC-CWDM-301-8	CWDM Channel Checker 1471~1611nm
OCC-CWDM-301-18	CWDM Channel Checker 1271~1611nm

# OCC-CWDM with VIP Port

## CWDM/ 8CH & 18CH Analyzers

CHANNEL ANALYZER



The OCC-CWDM Channel Analyzer is rugged, affordable and easy to use. The standard CWDM hand held analyzer is available in 18 or 8 channels with 20 nm spacing. The 18 channel analyzer tests 1271-1611nm and the 8 channel tests 1471-1611nm.

The OCC-CWDM analyzer is simple and fast to operate with its touch screen interface and twice a second scan. This low cost, full featured CWDM Channel Analyzer is designed to withstand your field operations. It offers a one button auto-test feature, power tilt feature with a full set of selectable scale limits. Information is displayed in graph or table mode which makes zeroing in on channel measurements easy and the user selects Pass/Fail thresholds that may be stored in a project based file system. Up to 1000 tests can be saved for later download via the USB PC port and documented with the included certification software for fast, easy reporting.

Use the onboard Video Inspection Scope to ensure connector cleanliness prior to testing. The OCC-CWDM is housed in a water resistant enclosure with a robust protective boot.

- Manufactured in the USA
- Pass/Fail Thresholds and Drift Statistics
- Auto-Test Zooms in on Active Channels
- Stores 1,000 Test Results
- USB/PC and VIP Ports

### OCC-CWDM Channel Analyzer Standard Package Includes:

Channel Analyzer, Universal Power Supply with Mains for US, UK, CE and AU. Interchangeable FC and SC Adapters, Manual and/or Software Download Card, USB Cable, Rubber Boot

### Ordering Information

OCC-CWDM-8	8-Channel CWDM Channel Analyzer w/ VIP Port
OCC-CWDM-18	18-Channel CWDM Channel Analyzer w/ VIP Port

### SPECIFICATIONS

Wavelength Range	18 Channel 1271-1611nm 8 Channel 1471-1611nm
Channel Spacing	20nm
Channel $\lambda$ Accuracy	1.0nm
Channel Pass Band	$\pm 6.5$ nm
Channel Power Range	+5dBm ~ -50dBm
Absolute Accuracy	$\pm 1$ dB
Max Composite Power	+23dBm
Polarization Dependent Loss	$\pm 0.2$ dB
Adjacent Channel Isolation	30dB
Measurement Time	< 1/2 Second
Readout Resolution	0.01 dB
Return Loss	>40dB
Optical Interface	Universal UPC (FC/SC)
Graphical Display	Bar Graph and Table View
Display	4" Color TFT
Battery	Rechargeable NiMH (8 Hours Operating Time)
Weight & Dimensions (HxWxD)	7.62" x 3.88" x 1.56" / 1.6 lb (193.5 x 98.5 x 39.6 mm / 725.7 g)
Warranty	Standard 1-Year Manufacturer Warranty

# OCC-DWDM2 Series

## DWDM Channel Analyzer

CHANNEL ANALYZER



The OCC-DWDM2 Optical Channel Analyzer is the most rugged and affordable full-featured Mini OSA on the market. It is designed for simple operation and is suited for field or lab use. Available in up to 88 channels for C or L bands, with 50 or 100 GHz channel spacing, it displays a full scan twice per second.

Offering high-end features such as Power Tilt for channel equalization and Gain Tilt to adjust EDFA gain flatness, the OCC-DWDM2 a real workhorse. One-button Auto-Test and a full set of selectable scale limits and thresholds makes zeroing in on channel measurements easy. For flexibility, the channels are selected by either wavelength or frequency and the information is displayed in graph or table mode on a 4" high-brightness color LCD TFT Touchscreen display.

The unit allows users to set Pass/Fail thresholds and can store up to 1,000 test results, which that can be downloaded onto a USB flash drive and documented with the included certification software for fast, easy reporting. The Onboard Help System guides new users through operations and assists in parameter settings. The OCC-DWDM2 Optical Channel Analyzer is housed in a ruggedized metal enclosure with a robust, protective boot.

- Up to 88 Channels
- 50 or 100 GHz
- Solid-State Optics
- 4" Color TFT Touchscreen
- Auto Test Zooms in on Active Channels

#### OCC-DWDM2 Standard Package Includes:

Channel Analyzer, Universal AC/DC Power Supply/Charger with Adapters for US, UK, CE and AU. Interchangeable FC and SC Adapters, Windows-Compatible Software, USB Cable, Manual, Rubber Boot and Carrying Case

#### Ordering Information

OCC-DWDM2-CB	C-Band 1530.40 - 1565.10nm (196.9 - 191.55 THz)
OCC-DWDM2-LB	L-Band 1570.42 - 1607.04nm (190.9 - 186.55 THz)

#### SPECIFICATIONS

Item / Model No.	OCC-DWDM2-CB	OCC-DWDM2-LB
Wavelength Range	C-Band 1530.40 - 1565.10nm (196.9 - 191.55 THz)	L-Band 1570.42 - 1607.04nm (190.9 - 186.55 THz)
Channel Spacing	50GHz, 100GHz	
Wavelength Accuracy	±0.1nm	
Channel Power Range	+10dBm ~ -50dBm	
Absolute Accuracy	±1 dB	
Max Composite Power	+28 dBm	
Polarization Dependent Loss	±0.15dB	
Optical Rejection Ratio	40dBc (@50GHz)	
Measurement Time	< 1/2 Second	
Readout Resolution	0.01dB	
Return Loss	>40dB	
Optical Interface	Universal UPC (FC/SC)	
Graphical Display	Bar Graph and Table View	
Display	4" Color TFT Touchscreen	
Battery	Rechargeable NiMH (4 hours Operating Time)	
Power	100-240V Universal US, GB, EU, AU Mains	
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)	
Weight & Dimensions (HxWxD)	7.62" x 3.88" x 1.56" (194 x 99 x 40 mm)	
Warranty	Standard 1-Year Manufacturer Warranty	

# Optical Loss

## Test Sets



- Semi-Rigid Carrying Case
- Power Meter (Six Wavelength)
- Light Source
- 400x Fiber Inspection Scope
- Cleaning Supplies

Precision Rated Optics has developed Optical Loss Go-Kits designed for specific markets within the communications industry. With new advanced capabilities that make testing simple, PRO Optical Loss Go-Kits are the best “go-to” kits for anyone involved in first-line optical fiber cabling installation and verification.

Whether you are a fiber technician or contractor, our expertly configured kits contain all the tools necessary to quickly measure loss, power levels, inspect and clean connector end-faces. Features including both SM and MM testing capabilities along with Test Cables and SC, ST, FC and universal adapters in a semi-rigid carrying case make PRO the best fiber test kit on the market.



### Ordering Information

**GOK-OLS-K1** | Go-Kit: Optical Loss Kit #1 (SM)

Includes: (1) LS-102D Light Source (1310/1550nm) fixed, (1) PM-102B Power Meter (-40~+23), (1) VFL-5 PRO Mini Visual Fault Locator 1mW, (1) HM-C400S Fiber Optic Inspection Scope (400x), (2) SC-SC SM9 3mm Simplex SM UPC Patchcord 1 Meter, (2) LC-SC 2mm Simplex SM UPC Patchcord 1 Meter, (2) Mating Sleeve SC/UPC SM Simplex (Z), (1) Mating Sleeve LC/UPC SM Duplex (Z), (1) Semi-rigid carrying case



### Ordering Information

**GOK-OLS-K2** | Go-Kit: Optical Loss Kit #2 (SM w/ Data Log)

Includes: (1) LS-102D Light Source (1310/1550nm) fixed, (1) PM-204B Power Meter (-50~+26 w/Data Storage), (1) VFL-5 PRO Mini Visual Fault Locator 1mW, (1) HM-C400S Fiber Optic Inspection Scope (400x), (2) SC-SC SM9 3mm Simplex SM UPC Patchcord 1 Meter, (2) LC-SC 2mm Simplex SM UPC Patchcord 1 Meter, (2) Mating Sleeve SC/UPC SM Simplex (Z), (2) Mating Sleeve LC/UPC SM Duplex (Z), (1) Semi-rigid carrying case



### Ordering Information

**GOK-OLS-K3** | Go-Kit: Optical Loss Kit #3 (SM & MM)

Includes: (1) LS-201Q Light Source (850/1300/1310/1550nm), (1) PM-102B Power Meter (-40~+23), (1) VFL-5 PRO Mini Visual Fault Locator 1mW, (1) HM-C400S Fiber Optic Inspection Scope (400x), (2) SC-SC SM9 3mm Simplex SM UPC Patchcord 1 Meter, (2) LC-SC 2mm Simplex SM UPC Patchcord 1 Meter, (2) Mating Sleeve SC/UPC SM Simplex (Z), (2) Mating Sleeve LC/UPC SM Duplex (Z), (2) SC-SC 62.5um Simplex MM UPC Patchcord 1 Meter, (2) LC-SC 62.5um Simplex MM UPC Patchcord 1 Meter, (2) Mating Sleeve SC/UPC MM Simplex (PB), (2) Mating Sleeve LC/UPC MM Duplex (PB), (1) Semi-rigid carrying case



### Ordering Information

**GOK-OLS-K4** | Go-Kit: Optical Loss Kit #4 (SM & MM w/ Data Log)

Includes: (1) LS-201Q Light Source (850/1300/1310/1550nm), (1) PM-204B Power Meter (-50~+26 w/Data Storage), (1) VFL-5 PRO Mini Visual Fault Locator 1mW, (1) HM-C400S Fiber Optic Inspection Scope (400x), (2) SC-SC SM9 3mm Simplex SM UPC Patchcord 1 Meter, (2) LC-SC 2mm Simplex SM UPC Patchcord 1 Meter, (2) Mating Sleeve SC/UPC SM Simplex (Z), (2) Mating Sleeve LC/UPC SM Duplex (Z), (2) SC-SC 62.5um Simplex MM UPC Patchcord 1 Meter, (2) LC-SC 62.5um Simplex MM UPC Patchcord 1 Meter, (2) Mating Sleeve SC/UPC MM Simplex (PB), (2) Mating Sleeve LC/UPC MM Duplex (PB), (1) Semi-rigid carrying case

GO-KITS

# 100 Series

## Light Sources



**LS-102D Light Source**

The LS-102D Light Source (1310nm/1550nm) offers excellent stability and portability for accurate fiber optic testing in connection with an optical power meter. Used together, this is called an OLTS (Optical Loss Test Set). The single output port on the LS-102D provides stable light power at both wavelengths (1310nm and 1550nm).

The LS-102D Light Source can operate in either Continuous Wave (CW) mode for testing or in Modulated Mode (Hz), which can be used to verify the signal being transmitted, similar to a tone generator for those familiar with copper wire testing. A "Low-Battery" indicator reminds the user to replace the battery and the unit's light weight, smaller size and ergonomic shape have been extremely well-received by technicians at every level.

The LS-102D comes standard with a SC/UPC connector port, as well as a standard 3-Year warranty, and a soft carrying case.

The LS-103D works like the LS-102D, but is built for multimode.

- Easy-to-Use, Straight-Forward Operation
- Automatically Detects Light Wavelength
- Backlit LCD
- Ruggedized Design
- Sold, Serviced and Supported in the USA

**100 Series Light Sources  
Standard Package Includes:**

SC/UPC Connector (built-in), User Manual, Calibration Report, Soft Carrying Case, 4 "AAA" Alkaline Batteries

\* APC available upon request

**Ordering Information**

LS-102D	LS-102D Light Source (1310/1550) (SM)
LS-103D	LS-103D Light Source (850/1300) (MM)

**SPECIFICATIONS**

Item / Model No.	LS-102D	LS-103D
Output Wavelength (nm)	1310 & 1550	850 & 1300
Central Wavelength	1310 ± 20nm & 1550 ± 20nm	850 ± 10nm & 1300 ± 20nm
Connector*	SC/UPC	SC/UPC
Emitter Type	LD	
Output Stability	Short-Term (15 minutes): <0.1dB; Long-Term ( 5 Hours or more): <0.2dB	
Spectral Width	5 nm	
Output Frequency (Hz)	270, 1000, 2000	
Output Power	-5 dBm	
Power Supply	4 "AAA" Alkaline Batteries	
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)	
Storage Temperature	-4° F ~ 158° F (-20° C ~ 70° C)	
Weight & Dimensions (HxWxD)	4.5" x 2.5" x 1.8" / 4.9 oz (115 x 65 x 30 mm / 140 g)	
Warranty	Standard 3-Year Manufacturer Warranty	

# 200 Series

## Dual Light Sources



**LS-202D Light Source**

- Easy-to-Use, Straightforward Operation
- Backlit LCD
- Rechargeable Batteries Included
- 3-year Warranty and Recommended Calibration Interval
- Sold, Serviced and Supported in the USA

### 200 Series Dual Light Source Standard Package Includes:

FC/UPC, SC/UPC, ST/UPC Interchangeable Connectors, User Manual, Worldwide-Compatible AC/DC Power Adapter, Rechargeable Battery (x2), Calibration Report, Soft Carrying Case

### Ordering Information

<b>LS-202D</b>	LS-202D Dual Light Source (1310/1550) SM
<b>LS-203DF</b>	LS-203DF Dual Light Source (852/1300) MM

The 200 Series Dual Light Source offers excellent stability and portability for accurate fiber optic testing. Single output port provides stable laser power at dual wavelengths. The compact unit operates in either continuous wave (CW) mode or modulated mode.

Designed with the technician in mind, output power is instantly adjustable from the keypad. A convenient “Low Battery” indicator reminds the user to recharge the battery, while the lightweight, compact, ruggedized case of the 200 Series delivers rock-solid reliability under all working conditions.

The 200 Series Dual Light Source comes standard with a 2.5mm port and FC/UPC, SC/UPC, ST/UPC connectors, a 3-Year manufacturer warranty .

The LS-203DF works like the LS-202D but with multimode 850/1300.

### SPECIFICATIONS

Item / Model No.	LS-202D	LS-203DF
<b>Output Wavelength (nm)</b>	1310 / 1550	850/1300
<b>Central Wavelengths (nm)</b>	1310/1550 ±20nm	850/1300 ±120nm
<b>Adjustable Range</b>	N/A	± 3 dB, 0.1 dB/step
<b>Emitter Type</b>	LD	
<b>Connector</b>	FC/UPC, SC/UPC, ST/UPC (Interchangeable) (APC is Available Upon Request)	
<b>Output Stability</b>	Short-Term (15 min.): < ±0.05dB @ 1310,1550nm Long Term (>8 Hours): < ±0.1dB @ 1310,1550nm	
<b>Spectral Width</b>	3 nm	
<b>Output Frequency (Hz)</b>	270 / 1,000 / 2000	
<b>Output Power</b>	±0.5 dB	
<b>Power Supply</b>	2500mAh Ni-MH AA (x2), AC/DC Power Supply	
<b>Operating Temperature</b>	14° F ~ 122° F (-10° C ~ 50° C)	
<b>Storage Temperature</b>	-4° F ~ 158° F (-20° C ~ 70° C)	
<b>Weight &amp; Dimensions (HxWxD)</b>	6.3" x 3" x 1.8" / 9.5 oz (160 x 76 x 45 mm / 270 g)	
<b>Warranty</b>	Standard 3-Year Manufacturer Warranty	

# 200 Series

## Quad Light Sources



**LS-201Q Light Source**

The LS-200 series offers excellent stability and portability for accurate fiber optic testing. Dual output ports provide stable output power at four common wavelengths, including 850nm, 1300nm, 1310nm, 1550nm (201Q) and 1310nm, 1490nm, 1550nm, 1625nm (202X). This compact unit will operate in either Continuous Wave (CW) mode or Modulated Mode (Hz).

Designed with the technician in mind, the output power is instantly adjustable from the keypad. A convenient "Low-Battery" indicator reminds the user to recharge the battery, while the light weight and smaller size of the LS-200 series delivers rock-solid reliability under all working conditions.

The LS-200 series is sold, serviced and supported in the USA and comes with a standard 3-Year warranty (extended warranty available), interchangeable connectors and a soft carrying case.

- "Twin" Function
- Long-Life, Rechargeable Ni-MH Batteries (x2)
- Ruggedized, Ergonomic Design
- Sold, Serviced and Supported in the USA

### OPTIONS Available:

- Connector Interfaces: FC/APC SC/APC ST/APC (Must be specified when ordering)

### 200 Quad Series Light Sources Standard Package Includes:

Light Source, FC/PC, SC/PC, ST/PC Connector Adapters, User Manual, AC/DC Charger, Batteries (x2), Test Report, Soft Carrying Case.

### Ordering Information

<b>LS-201Q</b>	Quad Light Source (850/1300/1310/1550)
<b>LS-202X</b>	LS-202X Light Source (1310/1490/1550/1625)

### SPECIFICATIONS

Item / Model No.	LS-201Q	LS-202X
<b>Output wavelength (nm)</b>	850/1300/1310/1550 (MM/SM)	1310/1490/1550/1625 (SM)
<b>Emitter Type</b>	LD	
<b>Connector</b>	SC/UPC, FC/UPC, ST/UPC	
<b>Output stability</b>	Short-Term (15 min) <±0.05dB @ 1310nm/1550nm / ±0.1dB @ 850nm/1300nm Long-Term (>8 Hours) <±0.1dB @ 1310nm/1550nm / ±0.2dB @ 850nm/1300nm	
<b>Central Wavelength</b>	± 20nm	
<b>Spectral Width</b>	5nm	
<b>Output Frequency (Hz)</b>	270 / 1,000 / 2,000	
<b>Output Power</b>	-5 dBm	
<b>Auto Power Off</b>	Yes	
<b>Backlight</b>	Yes	
<b>Operating Temperature</b>	14° F ~ 122° F (-10° C ~ 50° C)	
<b>Storage Temperature</b>	-4° F ~ 158° F (-20° C ~ 70° C)	
<b>Power Supply</b>	2500mAh Ni-MH AA (x2)	
<b>Weight &amp; Dimensions (HxWxD)</b>	6.3" x 3" x 1.7" / 9.5 oz (160 x 76 x 45 mm / 270 g)	
<b>Warranty</b>	Standard 3-Year Manufacturer Warranty	



# 100 Series

## Power Meters



**PM-102A Power Meter**

- High Performance Optical Detector
- Lower Power Consumption
- 3-year Warranty and Recommended Calibration Interval
- Sold, Serviced and Supported in the USA

### 100 Series Power Meters Standard Package Includes:

Power Meter, User Manual, AC/DC Power Adapter, Test Report, Adapters: FC/PC, SC/PC, ST/PC, Built-in 2.5mm Universal Adapter, 4 "AAA" Alkaline Batteries, Carrying Case, Screw Driver

### Ordering Information

<b>PM-102A</b>	PM-102A Power Meter -60 dBm +/- 3dBm
<b>PM-102B</b>	PM-102B Power Meter -40 dBm +/- 23dBm

The PM-100 Series works in conjunction with a Light Source, and has a measuring range of -60 ~ +3dB (PM-102A), -40dB ~ +23dB (PM-102B), detecting the light wavelengths at 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm, and 1650nm. Ruggedized, lightweight and reliable, the PM-100 Series packs a lot of power into a reasonably-priced, easy-to-use unit.

A convenient "Low Battery" indicator reminds the user to replace batteries soon. The compact size of the PM-100 Series delivers outstanding usability, typically only found on higher-priced units.

Sold, serviced and supported in the USA, the PM-100 Series comes standard with FC/PC, SC/PC, ST/PC connector interfaces as well as a standard 3-Year warranty, and a soft carrying case.

### SPECIFICATIONS

Item / Model No.	PM-102A	PM-102B
Measuring Range (dBm)	-60 ~ +3	-40 ~ +23
Wavelength (nm)	850/1300/1310/1490/1550/1625/1650	
Connectors	FC/PC, SC/PC, ST/PC	
Detector Type	InGaAs	
Accuracy	+ 0.35 dB (+ 10nW)	
Resolution	0.01dB	
Linearity	+ 5%	
Auto Power-off	Yes	
Backlight	Yes	
Reference Value	Yes	
Power Supply	4 "AAA" Alkaline Batteries	
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)	
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)	
Warranty	Standard 3-Year Manufacturer Warranty	

# 200 Series

## Power Meters



**PM-204A Power Meter**

POWER METERS

- Easy-to-Use, Straight Forward Operation
- Automatically Detects Light Wavelength
- Backlit LCD
- Ruggedized Design

**200 Series Power Meters  
Standard Package Includes:**

Power Meter, FC/UPC, SC/UPC, ST/UPC Interchangeable Connectors, NiMH Batteries (x2), Built-in 2.5mm Universal Adapter, Manual, Software (CD), USB Cable, AC/DC Power Adapter, FC/PC, SC/PC, ST/PC Connectors, Test Report, Soft Carrying Case

**Ordering Information**

<b>PM-204A</b>	PM-204A Power Meter -70 dBm ~ +10dBm
<b>PM-204B</b>	PM-204B Power Meter -50 dBm ~ +26 dBm

The PM 200 series of Power Meters are both rugged and refined. Operating in all commonly used wavelengths, these well-engineered units have been designed to function in laboratories, LANs, WANs and CATV environments, as well as long-distance optical networks.

The PM 200 series, used in conjunction with our Stabilized Light Sources, allows the user to identify optical fiber, measure optical attenuation, verify continuity and evaluate fiber link transmission quality. The Auto-Wavelength Recognition eliminates the need for communication between technicians and reduces the potential for error.

Sold, serviced and supported in the USA, the PM 200 series comes with a standard 3-Year manufacturer warranty as well as all standard connectors, AC/DC charger and carrying case.

**SPECIFICATIONS**

Item / Model No.	PM-204A	PM-204B
Accuracy	± 5% ± 1nW	± 5% ± 10nW
Resolution	0.01dB @ -60 ~ +10dBm; 0.1dB @ -70 ~ -60dBm	0.01dB @ -40 ~ +26dBm; 0.1dB @ -50 ~ -40dBm
Measuring Range	-70 ~ +10 (dBm)	-50 ~ +26 (dBm)
Calibrated Wave-length (nm)	850/1300/1310 /1490/1550/1625	
Detector Type	InGaAs	
Linearity	± 5%	
Tone Detection (Hz)	270,1000,2000	
Power Supply	2500mAh NiMH AA Batteries (x2), 6V AC/DC Adapter	
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)	
Storage Temperature	-4° F ~ 158° F (-20° C ~ 70° C)	
Weight & Dimensions (HxWxD)	6.3" x 3" x 1.8" / 9.5 oz (160 x 76 x 45 mm / 270 g)	
Connectors	FC/PC, SC/PC, ST/PC	
Data Storage	1000 Data Items	
Warranty	Standard 3-Year Manufacturer Warranty	

# PM-12 Series *Power Meters*



Small enough to fit in your shirt pocket, the PM-12 Series is a super-compact, ergonomic power meter that has a display range from -70dBm ~ +10dBm (PM-12A), -50dBm ~ +26dBm (PM-12B) (@1550nm) and can measure 850, 1300, 1310, 1490, 1550 and 1625nm wavelengths. The user can choose between "Linear" or "Logarithmic" power displays.

The PM-12, when used in conjunction with any Light Source can accurately measure signal loss in fiber, cable and other passive optical devices, effectively equating to a "Loss Test Set."

Sold, serviced and supported in the USA, the PM-12 comes standard with batteries and a nylon carrying case.

- Fully-Automatic Measuring Range
- Linear and Logarithmic Power Display
- 2.5mm Universal Interface
- Low Power Consumption - Over 100 Working Hours
- Relative Value Measurement Function

POWER METERS

### PM-12 Series Standard Package Includes:

Power Meter, AAA Batteries (x2), Nylon Wrist Strap, Nylon Carrying Case, Manual

### Ordering Information

PM-12A	PM-12A Power Meter -70dBm ~ +10dBm
PM-12B	PM-12B Power Meter -50dBm ~ +26dBm

### SPECIFICATIONS

Item / Model No.	PM-12A	PM-12B
Display Range	-70dBm ~ +10dBm @ 1550nm	-50dBm ~ +26dBm @ 1550nm
Accuracy	0.35dB ±10nW	0.35dB ±10nW
Resolution	0.01 dB	
Calibrated Wavelengths	850/1300/1310/1550/1490/1625	
Sensor Type	InGaAs	
Working Wavelength	800 ~ 1700	
Battery Life	230 Hours (3,500 Hours Stand-by)	
Power Source	AAA Batteries (x2)	
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)	
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)	
Environmental Conditions	0 ~ 90% RH (Humidity)	
Weight & Dimensions (HxWxD)	120mm x 33mm x 30mm 70g	
Warranty	Standard 3-Year Manufacturer Warranty	

# PM-501X-VFL

## Power Meter & Visual Fault Locator

POWER METER WITH VFL



The PM-501X-VFL from PRO combines an Optical Power Meter and Visual Fault Finder in one easy to use unit, reducing the need to carry two different testing tools and lowering costs.

The VFL has three different output power settings so it's like having 3 VFL's in one unit *plus a power meter*. The PM-501A-VFL power meter has a broad measuring of -50 dBm ~ +26 dBm, and PM-501B-VFL power meter function has a broad measuring range of -70 dBm ~ +6 dBm. It can measure the 6 most commonly used fiber optic wavelengths.

- OPM and VFL - Two In One Function
- VFL Output Power Can Be Adjusted
- Easy Operation and Handheld with Carry Case
- Lightweight and Durable, Making it Ideal for FTTH

**PM-501X-VFL Standard Package Includes:**

OMP/VFL, SC & ST Interchangeable Adapters, User Manual and/or Software Download Card, 1.5V AA Batteries (qty 3), Cotton Swabs, Soft Carrying Case

**Ordering Information**

PM-501A-VFL	Power Meter (-70 dBm ~ +6 dBm) with Visual Fault Locator (1mW, 5mW, 10 mW)
PM-501B-VFL	Power Meter (-50 dBm ~ +26 dBm) with Visual Fault Locator (1mW, 5mW, 10 mW)

**SPECIFICATIONS**

Optical Power Meter Module	
Detector Type	InGaAs
Measurement Range(dBm)	PM-501A-VFL
	PM-501B-VFL
Uncertainty	5%
Calibrated wavelengths(nm)	850,1300,1310,1490,1550,1625
Resolution(dB)	0.01
Optical Connector	FC/SC/2.5mm universal, for LC we provide FC-LC Hybrid adapter
Visual Fault Locator	
Wavelength(nm)	650±10
Output power(mW)	Can be adjusted at 1mW, 5mW, 10mW
Uncertainty	±0.3
General Specifications	
Power Supply	Alkaline Battery (3 AA 1.5V batteries)
Auto-off time	10mins
Operating Temperature	14°F ~ 140°F (-10°C ~ +60°C)
Storage Temperature	-13°F ~ 150°F (-25°C ~ +70°C)
Dimension	7.87 x 3.54 x 1.97in (200 x 90 x 50mm)

# PON-301B

## PON Meter



Rugged, reliable and designed as a “pass-through” device, the PON-301B PON Meter can perform in-service testing of all PON signals (1310/1490/1550nm) from anywhere within the network. The PON-301B also features a “Burst Mode,” as well as instantaneous “Pass/Warning/Fail” assessment.

Because the PON-301B is a pass-through device, it can be connected anywhere between the OLT and ONT, enabling all wavelengths to be tested simultaneously, providing no interruption of network services.

Sold, serviced and supported in the USA, the PON-301B comes with a 1-year manufacturer warranty and includes a charger and soft carrying case.

- “Pass-Through” Design
- Instantaneous “Pass/Warning/Fail” Assessment
- Upstream Signal Burst Mode Detection at 1310nm
- Data Storage for 2,000 Records
- User-Defined Threshold Settings
- LCD screen is viewable in sunlight

### PON-301B Standard Package Includes:

PON Meter, Lithium-ion Battery, Protective Rubber Boot, USB Data Transfer Cable, PC Software CD, AC/DC Power Adapter/Charger, CE Certificate, Certificate of Calibration, User Manual, Protective Soft Carrying Case

### Ordering Information

<b>PON-301B</b>	Triple-Play PON Meter 1310/1490/1550
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### SPECIFICATIONS

Calibrated Wavelength	1310nm	1490nm	1550nm
Measurement Range	-40 ~ +10	-40 ~ +12	-40 ~ +20
Spectral Passband (nm)	1310±50	1490±15	1550±10
Power Uncertainty (dB)	≤ 0.5		
Accuracy (dB)	0.01		
Insertion Loss (dB)	≤ 1.5		
Display	Color TFT		
Connectors	FC/PC (Interchangeable SC, ST)		
Data Storage	> 2,000 Records		
Data Interface	USB		
Power Supply	Rechargeable Lithium-ion Battery (1050mAh) AC/DC Power Adapter/Charger Voltage: 110-240 VAC Frequency: 50-60 Hz		
Battery Capacity	≥ 6 Hours		
Operating Temperature	14° F ~ 140° F (-10° C ~ 60° C)		
Storage Temperature	-13° F ~ 158° F (-25° C ~ 70° C)		
Environmental Conditions	0 ~ 95% (Humidity, Non-Condensing)		
Waterproof Rating	IP54		
Drop Test	2 meters		
Weight & Dimensions (HxWxD)	6.9" x 3.1" x 1.7" / 12.1oz (177 x 80 x 44mm / 345g)		
Warranty	Standard 1-Year Manufacturer Warranty		

# OLM-202 Series

## Optical Loss Meter

LOSS TEST SETS



- Perfect for Bi-directional Testing
- Auto Wavelength Recognition
- Modulation for Fiber Identification
- Data Storage up to 999 Items
- USB Interface
- Data Management Software

### OLM-200 Series Standard Package Includes:

User Manual, Rechargeable Batteries, Interchangeable FC/SC/ST Connectors (APC Optional), Worldwide-Compatible AC/DC Power Adapter, "Meter Data Manager" Software, USB Cable, Soft Carrying Case

### Ordering Information

OLM-201A	1310/1550nm (-70 ~ +10) Optical Loss Tester
OLM-201B	1310/1550nm (-50 ~ +26) Optical Loss Tester
OLM-202A	1310/1490/1550 (-70 ~ +10) Optical Loss Tester
OLM-202B	1310/1490/1550 (-50 ~ +26) Optical Loss Tester

The OLM-200 Series Optical Loss Meters provide the ultimate in convenience by combining a versatile 850, 1300, 1310, 1490, 1550 and 1625 (nm) Power Meter and a Light Source all in one unit. The OLM-201A and OLM-201B can transmit at 1310nm and 1550nm, while the OLM-202A and OLM-202B can transmit on 1310nm, 1490nm and 1550nm.

The OLM Power Meter features "Auto Wavelength Recognition", eliminating the possibility of user error by automatically setting itself to the wavelength being transmitted by the other unit. By using a pair of OLM-200 Series Optical Loss Meters, two technicians can test a fiber bi-directionally, without leaving the testing locations, simply by switching their units from Light Source mode to Power Meter mode and vice-versa. Fiber testing has never been easier, faster or more accurate!

Sold, serviced and supported in the USA, the OLM-200 Series is a tool that all technicians and installers should have in their toolbox. The OLM-200 Series comes standard with a 3-Year warranty, data management software, 2.5mm port and FC, SC and ST connectors for UPC (APC also available).

### SPECIFICATIONS

Item / Model No.	OLM-201A	OLM-201B	OLM-202A	OLM-202B
Light Source	Output Wavelength (nm)		1310/1550	
	Connector		Interchangeable FC/SC/ST	
	Modulation Frequencies (Hz)		270/1K/2K	
	Output Power (dBm)		-5dBm ± 0.5	
	Stability Long-Term (8h) (dB)		± 0.1@1310/1550nm; ± 0.2@1490nm	
	Stability Short-Term (15min) (dB)		± 0.05@1310/1550nm; ± 0.1@1490nm	
	Wavelength Recognizing Code		Yes	
Power Meter	Measuring Range (dBm)		-70 ~ +10	-50 ~ +26
	Calibrated Wavelength		850/1300/1310/1490/1550/1625 (nm)	
	Connector		Interchangeable FC, SC, ST (APC Optional)	
	Data Storage (items)		999	
	Ref. Value		Yes	
	Display Units		dB / dBm / mW / uW	
	Display Precision (dB)		0.01	
	Accuracy (nW)		± 5% ± 1	
	Wavelength Recognition		1310/1490/1550 (Input Power > -40dBm)	
	Tone Detection		270 Hz / 1KHz / 2KHz (Input Power > -40dBm)	
General Specification	Auto Power Off		Yes	
	Power Supply		2000mAh NIMH 1.2V, (x2), AC/DC Adapter	
	PC Interface		USB	
	Battery Life		> 100 Hours (Laser Off)	
	Operating Temperature		14° F ~ 122° F (-10° C ~ 50° C)	
	Storage Temperature		-4° F ~ 158° F (-20° C ~ 70° C)	
	Environmental Conditions		< 90% (Humidity, Non-Condensing)	
	Weight & Dimensions (HxWxD)		6.6" x 3" x 1.70" / 11oz (168 x 76 x 43mm / 310g)	
Warranty		Standard 3-Year Manufacturer Warranty (Extended Warranty Available)		

# OLM-302A

## MPO Loss Test Set



- Rugged Design with Protective Rubber Boot
- Quickly Evaluate MPO Link Quality
- Data Storage for 300 Sets of Records
- Features Tone Detection
- Includes Soft Carrying Case

### OLM-302A Standard Package Includes:

OLM-302A MPO Loss Test Set, NiMH Battery, Protective Rubber Boot, USB Data Transfer Cable, PC Software CD, AC/DC Power Adapter/Charger, CE Certificate, Certificate of Calibration, User Manual, Soft Carrying Case

### Ordering Information

OLM-302A	OLM-302A MPO Loss Test Set
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The OLM-302A MPO Loss Test Set from Precision Rated Optics is a versatile solution that allows technicians to make a precise evaluation of the quality of MPO links. Additionally, this loss test set helps in implementing incoming qualification of MPO components like cassettes and jumpers.

The key elements of this solution include the LS-302A Laser Light Source and PM-302A Optical Power Meter that can be connected directly with one jumper that provides measurement of loss on each of the 12 channels. A breakout MPO to LC or SC cable assembly can be added to test hybrid cables. By testing 12 or more fiber channels simultaneously at the touch of a button, the OLM-302A MPO Loss Test Set is the easiest MPO testing solution available on the market today.

### SPECIFICATIONS

Power Meter	Calibration wavelength	850/1300/1310/1550 (nm)
	Channels	12
	Connector Types	MPO / MTP (Female / Male)
	Data Storage	300 Sets
	Display Units	dB / dBm
	Resolution	± 0.01dB
	Uncertainty	± 0.5dB
	Maximum Input Power	+13dBm (Composite)
	Threshold Setting	4 wavelength
	Reference Setting	4 wavelength
	Tone Detection	Yes
	Measuring Range (dBm)	-60 ~ +3
	Light Source	Polarity Test
Frequency Recognition (Hz)		270/1K/2K
Output Wavelength (nm)		850nm
Channels		12
Connector		MPO / MTP (Female)
General	Modulation Frequencies (Hz)	270/1K/2K
	Spectral Type	VCSEL
	Power Supply	NiMH Rechargeable Battery / AC Adapter
	PC Interface	USB
	Battery Life	≥ 10 Hours
	Operating Temperature	32°F ~ 122°F (0°C ~ 50°C)
	Environmental Conditions	0 ~ 95% (Humidity, Non-Condensing)
	Weight & Dimensions (HxWxD)	7.5" x 4.1" x 2.2" / 24.7oz (190 x 105 x 55mm / 700g)
	Warranty	Standard 3-Year Manufacturer Warranty (Extended Warranty Available)

# OLT-301 Series

## Optical Loss Testers

LOSS TESTER



The OLT-301 Series Intelligent Optical Loss Tester is an all-in-one loss tester integrated with a Stabilized Light Source, Optical Power meter, Optical Loss Tester, ORL Tester and Length Testing functions. It can perform automatic bidirectional loss test on single fiber with Pass/Fail assessment. With rich functions, flexible configuration and excellent User friendly design, the OLT-301 Series is the ideal optical loss tester to completely evaluate the optical fiber link condition in FTTx, LAN, and CATV network.

- Optical Power Monitoring
- Automatic Wavelength Identification
- Data Transfer to PC via USB
- High Resolution Color LCD
- 1000 Test Records Storage and Management

### OLT-301 Series Standard Package Includes:

OLT-301 Optical Loss Tester, Lithium Battery, AC Adapter/Charger, USB Cable, Software CD, Soft Carrying Case, Warranty Card, CE Certificate, Certificate of Calibration, User Manual

### Ordering Information

OLT-301SM1AR	1310/1550nm, -70~+10 (dBm)
OLT-301SM1BR	1310/1550nm, -50~+27 (dBm)
OLT-301SM2AR	1310/1490/1550nm, -70~+10 (dBm)
OLT-301SM2BR	1310/1490/1550nm, -50~+27 (dBm)
OLT-301SM3AR	1310/1550/1625nm, -70~+10 (dBm)
OLT-301SM3BR	1310/1550/1625nm, -50~+27 (dBm)

### SPECIFICATIONS

Item / Model No.	OLT-301	
Power Meter	Calibration wavelength (nm)	850 / 1300 / 1310 / 1490 / 1550 / 1625
	Connector Types	FC Interchangeable SC, ST
	Data Storage	1000 records
	Display Units	W / mW / $\mu$ W / nW / pW / dBm / dB(REF)
	Resolution	0.01dB
	Accuracy	$\pm 0.5$ dB @ 850nm
	Detector Type	InGaAs
	Measuring Range (dBm)	-70 ~ +10 or -50 ~ +27
	Frequency Recognition (Hz)	270 / 1K / 2K
Light Source	Output Wavelength ( $\pm 20$ nm)	1310 / 1490 / 1550 / 1625
	Output Power	> -4dBm
	Spectrum Width	$\leq 5$ nm
	Emitter Type	FP-LD
	Output Mode (Hz)	270 / 1K / 2K
	Power Stability	$\pm 0.05$ dB / 15min; $\pm 0.10$ dB / 8hr
Optical Loss Test	Link Loss Range	50dB (1550nm, 200km)
	Link Loss Accuracy	$\pm 0.25$ dB
	Link Loss Test Time	< 2 seconds per wavelength
ORL Test	ORL Range	0~60dB (APC connector)
	ORL Accuracy	$\pm 0.75$ dB @ (0~50dB), $\pm 1.5$ dB @ (50~60dB)
	ORL Uncertainty	$\pm 0.5$ dB @ 20dB
Power Supply		Lithium Battery/ AC Adapter
Data Interface		USB
Battery Life		Continuous Operation $\geq 35$ hours
Backlight Display		Yes
Auto Off		Yes (Auto off after 5 minutes idle)
Storage Temperature		-40 $^{\circ}$ F ~ 158 $^{\circ}$ F (-40 $^{\circ}$ C ~ 70 $^{\circ}$ C)
Operating Temperature		-4 $^{\circ}$ F ~ 122 $^{\circ}$ C (-20 $^{\circ}$ C ~ 50 $^{\circ}$ C)
Environmental Conditions		0 ~ 95% (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)		7" x 3.1" x 1.7" / 12.34oz (177 x 80 x 44mm / 350g)
Warranty		Standard 1-Year Manufacturer Warranty



# OVA-201S / 202S

## Optical Attenuator



The OVA Series Optical Variable Attenuator for both singlemode wavelengths is a compact, portable instrument mainly used to introduce loss or attenuation into the fiber optic link for testing purposes or to reduce the signal strength of the transmit signal at the receiving end.

- Maintenance of Telecom Systems
- Maintenance of CATV Systems
- Fiber Optic Transmission System & Test Lab
- Various other Trouble Shooting Applications

### OVA-200 Series Standard Package Includes:

FC/PC, SC/PC, ST/PC interchangeable connectors, Carrying Case, User Manual, Rechargeable Battery, Worldwide Compatible AC/DC Adapter/Charger

### Ordering Information

OVA-201S	Optical Attenuator
OVA-202S	Optical Attenuator

### SPECIFICATIONS

Item / Model No.	OVA-201S	OVA-202S
Attenuation Range	0~80dB	0~60dB
Fiber Type	SMF 9/125μm	
Calibrated Wavelengths	1310nm/1550nm	
Linearity	≤0.3dB	
Accuracy	0.2dB @3~30dB, 1.0dB @ 30~60dB, 2.0dB@60~80 dB	0.2dB @3~20dB, 0.5dB @ 20~50dB, 1.0dB@50~60 dB
Insertion Loss	<3dB	
Return Loss	>50dB(PC)	
Max Input Power	-24dBm	
Power Supply	1.2 V Ni-MH Battery * 2pcs	
Connector	Interchangeable FC/PC, SC/PC, ST/PC connectors. (FC/APC, SC/APC are available at time of ordering)	
Operating temperature	-10° C to 50° C	
Storage temperature	-20° C to 60° C	
Relative humidity	0%~95% (non-condensing)	
Dimension	160L*76W*45H(nm)	
Weight	360g(Battery included)	

# OFI-30 Series

## Optical Fiber Identifier



The OFI-30 Optical Fiber Identifier is a rugged, all-metal, easy-to-use installation and maintenance instrument, which can detect low frequency tones at 270Hz, 1kHz and 2kHz. When traffic is present on the fiber under test, an audible tone can be heard. Fiber traffic direction is indicated by sequential LEDs on the probe.

By utilizing local detection technology (non-destructive macrobend detection which does not damage or overstress the fiber) the unit eliminates the need to open the fiber at the splice point for identification, eliminating the probability of interrupting service.

Sold, serviced and supported in the USA, the OFI-30 comes standard with a 1-Year manufacturer's warranty and includes 0.25mm, 0.9mm, 2.0mm and 3.0mm to satisfy various optical cables.

- All-Metal Construction.
- Identifies Traffic at 270Hz, 1KHz, 2KHz
- Core-Power Display of the Fibers (-50 ~ +10dBm)
- Very Low-Loss (Fiber Attenuation) when Testing is in Process
- Included Adapters: 0.25mm, 0.9mm, 2.0mm and 3.0mm

### SPECIFICATIONS

	OFI-30	OFI-30-HP
Detector Type	InGaAs	ø1mm InGaAs 2pcs
Optical Power Reading	-50 ~ +10dBm	-30 ~ +24(1550nm)
Power Supply	2x AAA Batteries	2x AAA Batteries
Identified Wavelength Range	800 ~ 1700nm	
Frequencies Detected	(CW) 270Hz (±5%), 1kHz (±5%), 2kHz (±5%)	
Adapter Type	0.25 (Applicable for "Bare" 250 micron fiber) 0.9 (Applicable for 900 micron fiber) 2.0 (Applicable for 2.0mm Cable ) 3.0 (Applicable for 3.0mm Cable )	
Signal Direction	Left & Right LED Indicator	
Signal Frequency	270Hz, 1kHz, 2kHz	
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)	
Storage Temperature	-13° F ~ 158° F (-25° C ~ 70° C)	
Dimensions & Weight	7.6" x 1.1" x 1" / 0.55lb(195 x 30 x 27 mm / 250g)	
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)	

#### OFI-30 Series Standard Package Includes:

Optical Fiber Identifier, Adapters (0.25mm, 0.9mm, 2.0mm and 3.0mm), Batteries, User Manual, Soft Carrying Case

#### Ordering Information

OFI-30	OFI-30 Optical Fiber Identifier
OFI-30-HP	OFI-30 Optical Fiber Identifier High Power

# Visual Fault Locators

The VFL-5 and VFL-10 are compact, powerful Visual Fault Locators with an output power of up to 1mW. The VFL's can be used to detect sharp bends and breaks in jacketed or bare fiber up to 10km in length. They can also be used to identify connectors in patch panels or to identify fibers during splicing operations.

## VFL-5



### VFL-5 Standard Package Includes:

VFL-5 Visual Fault Locator, AAA Batteries (2), Nylon Zipper Case, 2.5mm Spare Split Sleeve, Pack of Swabs, Quality Report

## VFL-10



### VFL-10 Standard Package Includes:

VFL-10 Visual Fault Locator, AA Batteries (2), Nylon Zipper Case, 2.5mm Spare Split Sleeve, Pack of Swabs, Quality Report

## SPECIFICATIONS

Item / Model No.	VFL-10	VFL-5
Wavelength (nm)	650 (±10)	650 (±10)
Emitter Type	FP, LD	FP, LD
Connector Type	Universal Standard 2.5mm, External 1.25mm Adapter	Universal 2.5 mm
Modulated Frequency (Hz)	1 (Non Frequency)	1 (non Frequency)
Output Power	1mW (10mW Optional)	1mW (10mW Optional)
Power Supply	AA Alkaline Batteries (x2)	AAA Alkaline Batteries (x2)
Battery Life	>15 Hours	> 40 Hours
Operating Temperature	14° F ~ 113° F (-10° C ~ 45° C)	14° F ~ 140° F (-10° C ~ 60° C)
Storage Temperature	-40° F ~ 158° F (-40° C ~ 70° C)	14° F ~ 158° F (-10° C ~ 70° C)
Environmental Conditions	0 ~ 95% (Humidity)	0 ~ 95% (Humidity)
Weight & Dimension (LxWxH)	7.1" x 0.6" / 4.2 oz (180 x 15 mm / 120 g)	3.9" x 1.2" x 0.7" / 2 oz (100 x 30 x 18 mm/ 60 g)
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)

## Ordering Information

VFL-10	Pen Style Visual Fault Locator (1mW)	VFL-5	VFL-5 Visual Fault Locator (1mW)
VFL-10/10	Pen Style Visual Fault Locator (10mW)	VFL-5-K1	VFL-5 Visual Fault Locator (1mW) with 1.25mm Universal Adapter
		VFL-5/10	VFL-5 Visual Fault Locator (10mW)

# VIP-35 Series

## Video Inspection Probe

INSPECTION



The VIP-35 Video Inspection Probe is designed to provide customers with the ability to troubleshoot network performance issues (most commonly caused by dirty connectors) by inspecting the end-face of a connector for debris. The VIP-35 includes a 400x inspection probe and a 3.5" TFT Active Matrix display for detection of even the smallest contaminants.

With the included probe tips, the technician has the ability to check the quality of both the cable and bulkhead connectors. The VIP-35 even includes a built-in PAL/NTSC video output, which allows viewing on a full-size external monitor.

Sold serviced and supported in the USA, the VIP-35 comes with a standard 1-year manufacturer's warranty and is an easy-to-use tool that saves time and helps assure optimum signal quality.

- 400x Inspection Probe
- 3.5" TFT Active Matrix Monitor
- Built-in Li-Ion Rechargeable Battery
- FC/SC Bulkhead Adapter
- LC Bulkhead Adapter
- 2.5mm Universal Adapter
- 1.25mm Universal Adapter

**VIP-35-DATA Standard Package Includes:**

VIP-35, 400X Inspection Probe and Monitor, AC/DC Charger, FC/SC Bulkhead Adapter, LC Bulkhead Adapter, 2.5mm Universal Adapter, 1.25mm Universal Adapter, USB Data Cable, Soft Carrying Case

**Ordering Information**

VIP-35-DATA	3.5" Video Inspection Kit w/ DATA
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**SPECIFICATIONS**

Data Storage	Yes
Data Download	Yes
Magnification	400X
Display Size	3.5"
Dimensions (HxWxD)	5.51" x 3.03" x 1.53"
Weight	14.1 oz
Display Type	TFT Active Matrix
Video Output	PAL / NTSC
Power	12V DC Built-in Li-ion Rechargeable Battery
Input Power	110-240VAC Adapter
Power Supply	AC or DC Operation
Battery	3 Hours
Charging	3 Hours
Operating Temperature	4° F ~ 122° F (-10° C ~ 50° C)
Connectors	1.25mm, 2.5mm Patchcord Tips
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)

# VIP-45 Series

## Video Inspection Probe



The ergonomically-designed VIP-45 Series Video Inspection Probe connects directly to your PC through the computer's USB 2.0 port. Powered by the USB connection, it features easy single finger focusing, a built-in image freeze/capture button, and detectable resolution to 0.5µm.

The VIP-45 Series Video Inspection Probe includes our standard video capture software, providing image display, image capture, digital zoom, and basic analysis tools. Pass/Fail analysis and re-reporting features can be added with our optional software upgrade.

- Convenient image capture button
- Digital zoom
- Inspect patchcord and adapter bulkhead connectors
- Optional WiFi Feature

### SPECIFICATIONS

	VIP-45-K1	VIP-45-K2	VIP-45-MPO-K1	VIP-45-MPO-K2
<b>Inspection Tips</b>	Universal 1.25mm UPC Patchcord tip Universal 2.5mm UPC Patchcord tip SC/FC UPC Bulkhead tip LC UPC Bulkhead tip	Universal 2.5mm APC Patchcord tip SC/FC APC Bulkhead tip	MPO/MTP PC Bulkhead tip	MPO/MTP APC Bulkhead tip
<b>Field of View</b>	~425µm x 320µm			
<b>Resolution</b>	0.5µm detectable			
<b>Operating Temperature</b>	0°C to 50°C			
<b>Storage Temperature</b>	-20°C to 70°C			
<b>Focus</b>	Manual adjustment, 2mm max travel			
<b>Dimensions</b>	35mm diameter x 175mm length (without tip)			
<b>Light Source</b>	Blue LED			
<b>Power Supply</b>	USB port of PC			

#### VIP-45 Series Standard Package Includes:

USB 2.0 digital inspection probe, Specified inspection tips, Soft carrying case, Standard video capture software, CD and manual.

#### Ordering Information\*

<b>VIP-45-K1</b>	Video Inspection Probe w/specified UPC tips
<b>VIP-45-K2</b>	Video Inspection Probe w/specified APC tips
<b>VIP-45-MPO-K1</b>	Video Inspection Probe w/MPO PC tip
<b>VIP-45-MPO-K2</b>	Video Inspection Probe w/MPO APC tip

\*Other Configurations Available Upon Request

#### Optional Accessories & Supplies

<b>VIP-45-WIFI</b>	WiFi Module for the VIP-45
<b>VIP-45-USB-ADPC</b>	USB to Micro USB Rt Angle Adapter Cable
<b>FBT-80</b>	Windows Based Tablet - Display

# VIP-55 Series

## Video Inspection Probe

INSPECTION



The ergonomically-designed VIP-55 Series Video Inspection Probe connects directly to your PC through the computer's USB 2.0 port. Powered by the USB connection, it features easy single finger focusing, a built-in image freeze/capture button, and detectable resolution to 1µm.

The VIP-55 Series Video Inspection Probe includes smartphone application to capture and record the fiber end-face from the Wi-Fi probe that is connected to android or iOS smartphone. The image can be captured or recorded as video and stored in your phone for easy sending to project managers and QA.

- Completely wireless, self-powered support
- Image-capture capability for documentation
- 400x, High definition, clear image
- Ideal for all types of connectors test: APC, UPC, MTP and more
- USB interface compatible with Windows, Linux, Mac, Android

### SPECIFICATIONS

Magnification	400x
Field of View	~348µm x 263µm
Resolution	<1µm detectable
Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 70°C
Focus Way	Single-way
Focus Speed	1-5s
Alignment	>98%
Capture Button	Available
Dimensions	35mm diameter x 175mm length (without tip)
Light Source	Blue LED
Power Supply	USB port of PC

### VIP-55 Series Standard Package Includes:

USB 2.0 digital inspection probe, Specified inspection tips, Soft carrying case, Standard video capture software, and link to manual download.

### Ordering Information\*

VIP-55 | Video Inspection Probe w/specified tips

\*Other Configurations Available Upon Request

### Optional Accessories & Supplies

FBT-80 | Windows Based Tablet - Display

# Fiber Scopes

## HM-C200S / C400S

The HM-C200S and the HM-C400S use a high-intensity, white LED and 200x (C200S) and 400x (C400S) magnification to inspect the end-face of a connector or cleaved fiber.

Sold, serviced and supported in the USA, the HM-CS Fiber Scopes come with a 1-year manufacturer's warranty, 1.25mm and 2.5mm adapters and a carrying case.



## HM-CL200

The HM-CL200 hand-held fiber microscope with 200x magnification can be used to determine the polish quality of cleaved fiber. It can also be used to detect scratches, contamination and imperfections.

Sold, serviced and supported in the USA, the HM-CL200 comes with a 1-year manufacturer's warranty and a protective case.



### SPECIFICATIONS

Item / Model No.	HM-C200S	HM-C400S	HM-CL200
Power Source	AAA Batteries (x3)		AAA Batteries (x2)
Light Source	White LED (Rated for 100,000 Hours)		White LED (Rated for 100,000 Hours)
Weight	1.1 lb (0.5 Kg)		0.88 lb (0.4 Kg)
Dimensions (LxW)	8.76" x 1.25" (225 x 32mm)		7.48" x 1.77" (190 x 45mm)
Controls	Momentary On/Off Switch for Light Source, Fine-Focus Control Wheel		Momentary On/Off Switch for Light Source, Fine-Focus Control Wheel
Safety Filter	Built-in IR Filter		Built-in IR Filter
Adapter Interface	1.25mm and 2.5mm Universal Adapters		1.25mm and 2.5mm Universal Adapters
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)		

#### HM-C Series Fiber Scopes Standard Package Includes:

Fiber Microscope (200x or 400x), 2.5mm Universal Adapter, 1.25mm, Universal Adapter, User Manual, Travel Case

#### HM-CL Series Fiber Scopes Standard Package Includes:

Fiber Microscope (200x), 2.5mm Universal Adapter, 1.25mm, Universal Adapter, User Manual, Travel Case

#### Ordering Information

HM-C200S	200x Fiber Scope
HM-C400S	400x Fiber Scope
HM-CL200	200x Fiber Scope

# Quick Click™

## Bulkhead Cleaner

CLEANING



CS-125



CS-250



CS-MPO

The PRO CS-125 Quick Click™ is a mechanical cleaning tool designed to clean connectors residing in an adapter, faceplate or unmated connector. The PRO CS-125 can clean LC and MU connectors. The CS-250 can clean SC, ST, FC and E2000 connectors. Both models can accommodate PC and APC polishes. The PRO MPO Bulkhead Cleaner is a mechanical cleaning tool designed to clean MPO/MTP connectors.

A simple pushing motion engages the tool, and a “click” can be heard, which alerts the operator that the tool is fully engaged. Because the CS does not use solvents, cleaning is instantaneous and there are no solvents to replace.

The CS Quick Click™ tools are sold, serviced and supported in the USA, are RoHS compliant, good for over 800 cleaning operations and are impact-resistant to 250N.

- Simple Pushing Motion to Engage Tool
- Audible CLICK to Alert the Operator When The Tool is Fully Engaged
- Dry Cleaning Material Eliminates the Need for Solvents
- Crush-Resistant to Over 250N

### Applications

- Telecom Central Offices
- Data Centers
- Cable Television Head-End
- Outside Plant and FTTx
- Fiber to the Antenna for WiMax and Cellular Networks
- Fiber Optic Broadcasting Including HDTV
- Fiber Optic Military and Civilian Aviation
- Military and Civilian Maritime Optical Networks
- Fiber Optic Satellite Communication System

### SPECIFICATIONS

CS-125	<ul style="list-style-type: none"> <li>• 800+ Cleanings per Unit</li> <li>• Cleans LC and MU Connectors with PC and APC Polishes</li> <li>• Cleans Connectors Loaded in a Bulkhead Adapter and on Unmasked Cable Assemblies</li> <li>• RoHS Compliant</li> </ul>
CS-250	<ul style="list-style-type: none"> <li>• 800+ Cleanings per Unit</li> <li>• Cleans SC, ST, FC and E2000 Connectors with PC and APC Polishes</li> <li>• Cleans Connectors Loaded in a Bulkhead Adapter and on Unmated Cable Assemblies</li> <li>• RoHS Compliant</li> </ul>
CS-MPO	<ul style="list-style-type: none"> <li>• 600+ Cleanings per Unit</li> <li>• Cleans MPO and MTP Connectors</li> <li>• Cleans Connectors Loaded in an Adapter, Faceplate and Unmated Connector</li> <li>• RoHS Compliant</li> </ul>

### Effective Against Following Contaminates

- Skin Oil Residue
- Salt Water Residue
- Alcohol Residue
- Hand Lotion
- Distilled Water Residue
- Graphite
- T-Shirt Lint

### Ordering Information

CS-125	1.25mm Quick Click™ Bulkhead Cleaner
CS-250	2.5mm Quick Click™ Bulkhead Cleaner
CS-MPO	MPO Bulkhead Cleaner



# PRO-CT-001

## Fiber Optic Cleaning Cassette

Precision Rated Optics PRO-CT-001 fiber optic cleaning cassette cleans SC, SC2, FC, ST, DIN, D4, MU, LC, MT connectors. More than 500 cleanings per cartridge.



### Ordering Information

PRO-CT-001	Fiber Optic Cleaning Cassette
PRO-CT-004	Cassette Cleaner Replacement Reel

# PRO-LFW-100

## Lint-Free Wipes

Precision Rated Optics PRO-LFW-100 lint free clean wipe is designed to clean fibers and connector end-faces with alcohol and other cleaning products without leaving anything behind.



### Ordering Information

PRO-LFW-100	Lint-Free Wipes (100ct)
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# PRO-CT2-002

## Wrapped Cleaning Stick

Wrapped cleaning stick for 1.5mm LC/MU/MT connectors



### Ordering Information

PRO-CT2-002-02	1.5mm Wrapped Cleaning Stick - 100pk
PRO-CT2-002-025	1.5mm Wrapped Cleaning Stick - 5pk

# PRO-CC-AQ/QC

The PRO-CC Fiber Optic Cleaner is a water-based, non-toxic, static-eliminating, no-residue cleaning spray designed to clean bulkheads and ferrules.



### Ordering Information

PRO-CC-AQ	Fiber Optic Cleaner
PRO-CC-QC	Fiber Optic Cleaner

# PRO-CT2-010

## Foam Swabs

Foam swabs for 2.5mm SC, SC2, FC,ST, DIN, D4 MU, LC, MT connectors



### Ordering Information

PRO-CT2-002-010	2.5mm Foam Swabs - 100pk
SWB-V100	V-Groove Foam Swabs - 100pk

Wrapped cleaning stick for 2.5mm SC/ST/FC connectors



### Ordering Information

PRO-CT2-002-01	2.5mm Wrapped Cleaning Stick - 100pk
PRO-CT2-002-015	2.5mm Wrapped Cleaning Stick - 5pk

# CLEANING

## **Go-Kit**® *Cleaning Kits*



**PRO-CK-TECH**



**PRO-CK-CLEAN-BA**



**PRO-CK-CLEAN-01**



**PRO-CK-CLEAN-02**

### Cleaning Kits

Item Code	Description	PRO-CK-TECH	PRO-CK-CLEAN-BA	PRO-CK-CLEAN-01	PRO-CK-CLEAN-02
PRO-BAG-SMALL	10" x 12" Black Canvas Bag	X			
PRO-BAG-LARGE	12" x 10" x 11" Black Canvas Bag		X	X	X
PRO-CT2-002-015	Cleaning Stick Wrapped 2.5mm (100 Pack)	X	X	X	X
PRO-CT2-002-025	Cleaning Stick Wrapped 1.25mm (100 Pack)	X	X	X	X
TC-1	American Polywater SqueezyKleen Wipes (10)	X	X	X	X
PRO-CC-AQ	PRO Connector Cleaner Water Base	X	X	X	X
PRO-CC-QC	PRO Connector Cleaner- Pump-Spray	X	X	X	X
PRO-LFW-100	Lint-free Wipes (100ct)	X	X	X	X
P1501E-1	Cotton Swab 6" General SM (100 Pack)	X	X	X	X
FOM-0005	Swabs Mini Foam 2.5mm (50 Pack)	X	X	X	X
CP410-1	Optic Prep Pre-saturated Pads (1 Packet)		X	X	X
FOM-CP421-1	Electro-Wash Wipe (MX) (1 Packet)		X	X	X
PRO-CT-001	Fiber Optic Cleaning Cassette		X	X	X
PRO-CT-004	Replacement Cassette Reel		X	X	X
PRO-CS-125	Quick Click™ 1.25mm (LC)			X	X
PRO-CS-250	Quick Click™ 2.5mm (SC)			X	X
HM-C400S	400x Fiber Scope				X

### Ordering Information

PRO-CK-TECH	Fiber Optic Technician Cleaning Kit	PRO-CK-CLEAN-01	Fiber Optic Cleaning Kit w/Quick Clicks™
PRO-CK-CLEAN-BA	Basic Fiber Optic Cleaning Kit	PRO-CK-CLEAN-02	Fiber Optic Cleaning Kit w/ 400x Scope

## PRO-FSC-200



## *Fiber Scrap Container*

Precision Rated Optics PRO-FSC-200 fiber optic scrap disposal can. Loose fiber optic scraps can be a safety hazard and can cause eye injuries. Be sure to keep your work space safe and clean with a PRO-FSC-200 fiber optic scrap collection can.

### Ordering Information

PRO-FSC-200	Fiber Scrap Container
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CLEANING



## Tool Kits



**PRO-TK-STARTER**



**PRO-TK-DELUXE**



**PRO-TK-PROF**

Item / Model No.	Description	PRO-TK-STARTER	PRO-TK-DELUXE	PRO-TK-PROF
PRO-BAG-LARGE	12" x 10" x 11" Black Canvas Bag Large	X	X	X
HM-C400S	Fiber Optic Inspection Scope (400X)	X	X	X
PRO-FSC-200	PRO-FSC-200 Fiber Scrap Container	X	X	X
SHARPIE-BK	Black Sharpie	X	X	X
501473-31R25	Empty syringe w/ .9mm Needle (25pk)	X	X	X
PRO-CP410-1	Optic Prep Tissue - 1 Packet	X	X	X
PRO-CW34	Fiber Optic Cleaning Wipes	X	X	X
PRO-IA-4OZ	Empty 4oz bottle for Alcohol	X	X	X
RMC-6	Measurement Scale 6" (150mm)	X	X	X
WO-1067G	Safety Glasses	X	X	X
7090	Loctite Formula 7090 Epoxy Hardener	X	X	X
PP-575	Hand polish pad (5.75") 1/16" thick	X	X	X
UC-8039	Fiber Optic Crimp Tool with Die	X	X	X
CS-30-DE	Double Ended Carbide Scribe	X	X	X
FOPD-25	Universal Fiber Optic Polishing Disk	X	X	X
680	Anaerobic Adhesive Hardener	X	X	X
JIC-186	Kevlar Shears	X	X	X
JIC-375	Fiber Optic Stripper Three Hole	X	X	X
PRO-9111A	Glass Polish Plate 6" x 9"	X	X	X
PRO-0008	Electrical Tape	X	X	X
PRO-0109-5-1-03	Polish Film 3 in 1 (5, 1, .3um) 25pk	X	X	
FOPD-LC	Aluminum Fiber Optic Polishing Disk LC		X	
SMART-STRIP	Buffer Tube Stripper			X
PRO-0102-1	1 um Alum. Oxide Polish Film 9" x 6.5" (25P)			X
PRO-0102-03	.3um AL Oxide Polish Film 0.3um 9" x 6.5" (25P)			X
PRO-0102-5	5 um Silicon Carbide Polish Film 9" x 6.5" (25P)			X
PRO-1008	Canned Air - Tech Spray 10oz			X

TOOLS

# TOOL KITS

## Go-Kit<sup>®</sup> Tool Kits



**PRO-TK-QWIKTERM**



**PRO-TK-VGROOVE**



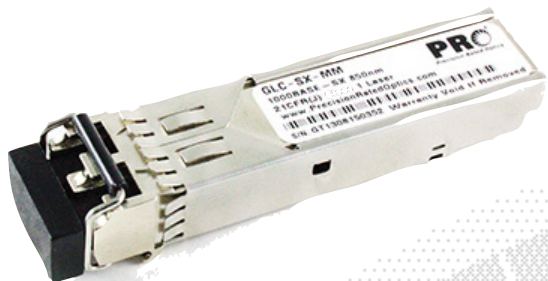
**PRO-TK-HANDTOOL**

TOOLS

Item / Model No.	Description	PRO-TK-QWIKTERM	PRO-TK-VGROOVE	PRO-TK-HANDTOOL
PRO-BAG-LARGE	12" x 10" x 11" Black Canvas Bag Large	X		
PRO-BAG-SM-NL	12" x 10" Black Canvas Bag Small		X	X
JIC-186	Kevlar Shears	X		X
JIC-375	Fiber Optic Stripper Three Hole	X		X
HM-C400S	Fiber Optic Inspection Scope (400X)	X		
PRO-FSC-200	PRO-FSC-200 Fiber Scrap Container	X		
SHARPIE-BK	Black Sharpie	X		
FS100	Polishing/Work mat (Black) (22 x 14)	X		
PRO-6000N	Fiber Optic Cleaver	X		
PRO-CC-QC	PRO-CC-QC Connector Cleaner- Pump-Spray	X	X	
PRO-LFW-100	PRO-LFW-100 Lint-free Wipe (100ct.)	X	X	
FB-11VG	V-Groove Cleaning Swabs (50/tube)		X	
VGB-003-CR	V-Groove Brush		X	
FOM-0005	Swabs Mini Foam 2.5mm 50 Pack		X	
D5111	Electrode Sharpener/Cleaning Pad		X	
JIC-842	Telecom Long Nose Pliers			X
JIC-63050	High Leverage Cable Cutters			X
CST-1900	Round Cable Strippers			X
CSR-1575	Cable Slitting and Ring Tool			X
KN-7	Cable Splicing Knife			X
10-099H	Utility Knife			X
FOD-2000	Fiber Optic Drop Cable Slitter			X

# Small Form Pluggables

SMALL FORM PLUGGABLES



Small Form Pluggables (SFPs) are used for both telecommunication and data communication applications. Fiber optic transceivers are a popular industry format jointly developed and supported by many network component vendors. They are designed to interface a network device motherboard, such as a switch, router, media converter, or similar device, to a fiber optic or copper networking cable. They come in a variety of form factors specified by a multi-source agreement. A fiber optic transceiver is an important device in the optical fiber communication systems, which can be performed between the photoelectric signal conversion, with the receiving and transmitting functions. The fiber optic module is typically composed by the optoelectronic devices, the functional circuit and the optical interface, the optoelectronic device includes a transmitter and receiver in two parts.

## GLC

GLC SFPs are programmed to be fully compatible and functional with all intended Cisco Series switching devices. This SFP optical transceiver is designed for IEEE 802.3 Gigabit Ethernet interconnects and is designed to be compliant with SFF-8472 SFP Multi-source Agreement (MSA). This module is designed for single mode simplex fiber and operates at a nominal transmit wavelength of 1310nm and nominal receive wavelength of 1490nm.

## SFP

SFP SFPs are programmed to be fully compatible and functional with all intended Cisco switching devices. This SFP module is based on the 10G Ethernet IEEE 802.3ae standard and is designed to be compliant with the SFF-8431 SFP Multi-source Agreement (MSA). This module is designed for multimode fiber and operates at a nominal wavelength of 1310nm up to 220M.

## WS

WS SFPs are programmed to be fully compatible and functional with all intended Cisco Series switching devices. This GBIC module is based on the Gigabit Ethernet IEEE 802.3 and 1000Base-T standard and is designed to be compliant with GBIC Rev 5.5 specifications. This module is designed for copper wire cabling up to 100 meters.

## X2

X2 SFPs are programmed to be fully compatible and functional with all intended Cisco Series switching devices. This X2 optical transceiver is designed for IEEE 802.3ae 10GBASE-ER interconnects and is compliant with the X2 Multi-Source Agreement (MSA) Specification. This module is designed for single mode fiber and operates at a nominal wavelength of 1550nm up to 40KM.

## XENPAK

XENPAK SFPs are programmed to be fully compatible and functional with all intended Cisco Series switching devices. This XENPAK optical transceiver is designed for IEEE 802.3ae 10GBASE-ER interconnects and is compliant with the XENPAK Multi-Source Agreement (MSA) Specification. This module is designed for single mode fiber and operates at a nominal wavelength of 1550nm up to 40KM.

## XFP

XFP SFPs are programmed to be fully compatible and functional with all intended Cisco switching devices. This XFP optical transceiver is designed for IEEE 802.3ae 10GBASE-ER, 10GBASEEW, 10GFC and OC-192/STM-64 interconnects and is compliant with the XFP Multi-Source Agreement (MSA) Specification. This module is designed for single mode fiber and operates at a nominal wavelength of 1550nm up to 40KM.

## Ordering Information

GLC-BX-D	1000Base-BX10 1490 TX/1310 RX Cisco Comp
GLC-BX-U	1000Base-BX10 1310 TX/1490 RX Cisco Comp
GLC-EX-SMD	1000Base-EX SM E-Temp 1310 DOM Cisco Comp
GLC-LH-SM	GE SFP LC/UPC LX/LH Cisco Compatible
GLC-LH-SMD	1000Base-LX SFP SM E-Temp DOM Cisco Comp
GLC-SX-MM	GE SFP LC/UPC SX Cisco Compatible
GLC-SXMMMD	1000Base-SX SFP MM E-Temp DOM Cisco Comp
GLC-T	10/100/1000Base SFP Transceiver (RJ45)
GLC-ZX-SM	GE SFP LC/UPC ZX Cisco Compatible
GLC-ZX-SMD	1000Base-ZX SM E-Temp 1550 DOM Cisco Comp
SFP-10G-ER	10GBase-ER SFP+ SM Cisco Compatible
SFP-10G-LR	10GBase-LR SFP+ SM Cisco Compatible
SFP-10G-LRM-TPC	SFP 10GBASE-LRM SFP+ Module MMF and SMF
SFP-10G-SR	10GBase-SR SFP+ MM Cisco Compatible
SFP-10G-ZR	10GBase-ZR SFP+ SM Cisco Compatible
SFP-LX-SM-0220	SFP 1.25G, 1310nm, 20km, LC, SM, Duplex
WS-C2950G-12-EI	Cisco 2900 Series 12x RJ45 2x GBIC Swith
WS-G5483	1000Base-T GBIC Cisco Compatible

WS-G5484	1000Base-SX GBIC MM Cisco Compatible
WS-G5486	1000Base-LX/LH GBIC SM/MM Cisco Comp
WS-G5486-C	1000Base-LX/LH GBIC SM/MM Cisco
WS-G5487	1000Base-ZX GBIC SM Cisco Compatible
X2-10GB-ER	10GBase-ER X2 SM Cisco Compatible
X2-10GB-LR	10GBase-LR X2 SM Cisco Compatible
X2-10GB-SR	10GBase-SR X2 MM Cisco Compatible
X2-10GB-T	10GBase-T X2 CAT6A/CAT7 Cisco Compatible
X2-10GB-ZR	10GBase-ZR X2 SM Cisco Compatible
XENPAK-10GB-ER	10GBase-ER XENPAK Cisco Compatible
XENPAK-10GB-LR	10GBase-LR XENPAK Cisco Compatible
XENPAK-10GB-SR	10GBase-SR XENPAK Cisco Compatible
XENPAK-10GB-ZR	10GBase-ZR XENPAK Cisco Compatible
XFP-10GER192IR	XFP 10GBase-ER/OC/STM-64 IR-2 Cisco Comp
XFP-10GER192IRP	XFP 10GBase-ER/OC/STM-64 IR-2 Cisco Comp
XFP-10GLR192SR	XFP 10GBase-LR/OC/STM-64 SR-1 Cisco Comp
XFP-10G-MM-SR	10GBase-SR XFP MM Cisco Compatible
XFP-10GZR-OC192	XFP 10GBase-ZR/OC/STM-64 LR-2 Cisco Comp

## Fixed Fiber Optic Attenuators

Attenuators reduce the power (signal strength) in a fiber optic cable at values ranging from 3dB ~ 20dB. PRO's fixed fiber optic attenuators are compact, adapter-style components that are useful in a variety of singlemode fiber applications, including fiber amplifiers, DWDM and with telecom equipment. All PRO attenuators are constructed with durable Zirconia ferrules and built to extremely high tolerances.

Fixed attenuators are available for SC/UPC, FC/UPC, LC/UPC, ST/UPC, FC/APC and SC/APC applications. Variable Attenuators are also available.

### Ordering Information



ATTENUATORS

AT-MF-CACA01	AT-MF-CACA01 In-Line Attenuator (Male / Female) SC/APC 1 dB
AT-MF-CACA02	AT-MF-CACA02 In-Line Attenuator (Male / Female) SC/APC 2 dB
AT-MF-CACA03	AT-MF-CACA03 In-Line Attenuator (Male / Female) SC/APC 3 dB
AT-MF-CACA04	AT-MF-CACA04 In-Line Attenuator (Male / Female) SC/APC 4 dB
AT-MF-CACA05	AT-MF-CACA05 In-Line Attenuator (Male / Female) SC/APC 5 dB
AT-MF-CACA06	AT-MF-CACA06 In-Line Attenuator (Male / Female) SC/APC 6 dB
AT-MF-CACA07	AT-MF-CACA07 In-Line Attenuator (Male / Female) SC/APC 7 dB
AT-MF-CACA08	AT-MF-CACA08 In-Line Attenuator (Male / Female) SC/APC 8 dB
AT-MF-CACA09	AT-MF-CACA09 In-Line Attenuator (Male / Female) SC/APC 9 dB
AT-MF-CACA10	AT-MF-CACA10 In-Line Attenuator (Male / Female) SC/APC 10 dB
AT-MF-CACA11	AT-MF-CACA11 In-Line Attenuator (Male / Female) SC/APC 11 dB
AT-MF-CACA12	AT-MF-CACA12 In-Line Attenuator (Male / Female) SC/APC 12 dB
AT-MF-CACA13	AT-MF-CACA13 In-Line Attenuator (Male / Female) SC/APC 13 dB
AT-MF-CACA14	AT-MF-CACA14 In-Line Attenuator (Male / Female) SC/APC 14 dB
AT-MF-CACA15	AT-MF-CACA15 In-Line Attenuator (Male / Female) SC/APC 15 dB
AT-MF-CACA16	AT-MF-CACA16 In-Line Attenuator (Male / Female) SC/APC 16 dB
AT-MF-CACA17	AT-MF-CACA17 In-Line Attenuator (Male / Female) SC/APC 17 dB
AT-MF-CACA18	AT-MF-CACA18 In-Line Attenuator (Male / Female) SC/APC 18 dB
AT-MF-CACA19	AT-MF-CACA19 In-Line Attenuator (Male / Female) SC/APC 19 dB
AT-MF-CACA20	AT-MF-CACA20 In-Line Attenuator (Male / Female) SC/APC 20 dB

AT-MF-CUCU01	AT-MF-CUCU01 In-Line Attenuator (Male / Female) SC/UPC 1 dB
AT-MF-CUCU02	AT-MF-CUCU02 In-Line Attenuator (Male / Female) SC/UPC 2 dB
AT-MF-CUCU03	AT-MF-CUCU03 In-Line Attenuator (Male / Female) SC/UPC 3 dB
AT-MF-CUCU04	AT-MF-CUCU04 In-Line Attenuator (Male / Female) SC/UPC 4 dB
AT-MF-CUCU05	AT-MF-CUCU05 In-Line Attenuator (Male / Female) SC/UPC 5 dB
AT-MF-CUCU06	AT-MF-CUCU06 In-Line Attenuator (Male / Female) SC/UPC 6 dB
AT-MF-CUCU07	AT-MF-CUCU07 In-Line Attenuator (Male / Female) SC/UPC 7 dB
AT-MF-CUCU08	AT-MF-CUCU08 In-Line Attenuator (Male / Female) SC/UPC 8 dB
AT-MF-CUCU09	AT-MF-CUCU09 In-Line Attenuator (Male / Female) SC/UPC 9 dB
AT-MF-CUCU10	AT-MF-CUCU10 In-Line Attenuator (Male / Female) SC/UPC 10 dB
AT-MF-CUCU11	AT-MF-CUCU11 In-Line Attenuator (Male / Female) SC/UPC 11 dB
AT-MF-CUCU12	AT-MF-CUCU12 In-Line Attenuator (Male / Female) SC/UPC 12 dB
AT-MF-CUCU15	AT-MF-CUCU15 In-Line Attenuator (Male / Female) SC/UPC 15 dB
AT-MF-LULU01	AT-MF-LULU01 In-Line Attenuator (Male / Female) LC/UPC 1 dB
AT-MF-LULU02	AT-MF-LULU02 In-Line Attenuator (Male / Female) LC/UPC 2 dB
AT-MF-LULU03	AT-MF-LULU03 In-Line Attenuator (Male / Female) LC/UPC 3 dB
AT-MF-LULU04	AT-MF-LULU04 In-Line Attenuator (Male / Female) LC/UPC 4 dB
AT-MF-LULU05	AT-MF-LULU05 In-Line Attenuator (Male / Female) LC/UPC 5 dB
AT-MF-LULU10	AT-MF-LULU10 In-Line Attenuator (Male / Female) LC/UPC 10 dB

## Low Cost... Quality Product... Fast Shipment



### Application

The Precision Rated Optics family of wall mounted optical termination enclosures are designed to provide solutions for both the interconnection of patch cabling and a combination of patching and splicing. The product line accommodates from a single adapter panel up to 16 adapter panels. Depending on the type of optical termination panel used, enclosures can support up to 192 terminations. The product line is separated into several application specific groups to support the termination capacity and feature sets required for the enclosure environment.

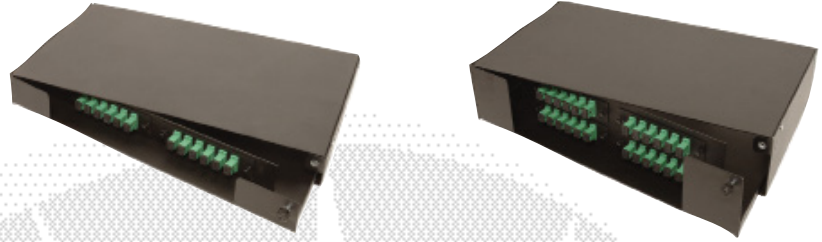
### Features

- Steel and aluminum construction
- Polyester powder coat finish in standard black or tan
- All Corrosion resistant materials
- Several units are designed with additional means of security but maintaining ease in access.
- Individual compartments for separation of network and distribution terminations.
- Wide range of sizes and feature sets to accommodate specific application requirements.
- Easy to install, load, and maintain.
- Available pre-loaded with adapter panels and pigtails

## Swing-Out Style

### Rack Mount Fiber Distribution Enclosures

Precision Rated Optics swing-out rack mounted enclosures are designed to provide connectivity and distribution solutions. Enclosures are supplied with universal mounting hardware for 19" or 23" mounting. Swing out style enclosures are designed to support the storage of splice trays.



Part #	RM-ADW102-BS	RM-ADW204-BS
Splice Tray Capacity	(2)	(4)
Rack Unit	1	2
Adapter Capacity	(2) Panels	(4) Panels
Style	Swing-out	Swing-out
Available Colors	Black	Black
Size (H" x W" x D") in	1.75" x 17" x 11.0"	3.5" x 17" x 11.0"
Weight	12 lbs.	13 lbs.
Material	16 GA Powder Coated Steel	16 GA Powder Coated Steel

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Slide-Out Removable Top Style

### Rack Mount Fiber Distribution Enclosures

Precision Rated Optics slide-out removable top rack mounted enclosures are designed to provide connectivity and distribution solutions. Enclosures are supplied with universal mounting hardware for 19" or 23" mounting. Slide-out removable top style enclosures are designed to support the storage of splice trays.



Part #	RM-ADM103-BS	RM-ADM206-BS	RM-ADM309-BS
Splice Tray Capacity	(2)	(3)	(5)
Rack Unit	1	2	3
Adapter Capacity	(3) Panels	(6) Panels	(9) Panels
Style	Slide-out Removable Top	Slide-out Removable Top	Slide-out Removable Top
Available Colors	Black	Black	Black
Size (H" x W" x D") in	1.75" x 17" x 14.0"	3.50" x 17" x 14.0"	5.25" x 17" x 14.0"
Weight	15 lbs.	19 lbs.	20.5 lbs.
Material	.060" Powder Coated Steel	.060" Powder Coated Steel	.060" Powder Coated Steel

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.



## Slide-Out Style

### Rack Mount Fiber Distribution Enclosures

Precision Rated Optics slide-out rack mounted enclosures are designed to provide connectivity and distribution solutions. Enclosures are supplied with universal mounting hardware for 19" or 23" mounting. Slide-out style enclosures are designed to support the storage of splice trays.



Part #	RM-ADL204-BS/BA	RM-ADL306-BS/BA	RM-ADL412-BS/BA	RM-ADL8524-BS/BA
Splice Tray Capacity	(2)	(3)	(8)	(16)
Rack Unit	2	3	4	8
Adapter Capacity	(4) Panels	(6) Panels	(12) Panels	(24) Panels
Style	Slide-out	Slide-out	Slide-out	Slide-out
Available Colors	Black	Black	Black	Black
Size (H" x W" x D") in	3.5" x 17" x 14.0"	5.25" x 17" x 14.0"	7.0" x 17" x 14.0"	14.88" x 17" x 14.0"
Weight	(Steel 22 lbs.) (Alum 12 lbs.)	(Steel 24 lbs.) (Alum 13 lbs.)	(Steel 26 lbs.) (Alum 14 lbs.)	19 lbs.
Material	.060" Powder Coated Steel (or) .060" Powder Coated Aluminum	.060" Powder Coated Steel (or) .060" Powder Coated Aluminum	14 GA Powder Coated Steel (or) .060" Powder Coated Aluminum	.060" Powder Coated Aluminum (Black or White)

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Slide-Out Style Combination

### Rack Mount Fiber Patch & Splice Distribution Enclosures

Precision Rated Optics slide-out combination patch & splice rack mounted termination enclosures are designed to provide connectivity and distribution solutions. Enclosures are supplied with universal mounting hardware for 19" or 23" mounting. Slide-out style combination patch and splice enclosures are designed to support the storage of splice trays.



Part #	RM-ADE404-BA	RM-ADE8512-BA
Splice Tray Capacity	(4)	(8)
Rack Unit	4	8
Adapter Capacity	(4) Panels	(12) Panels
Style	Slide-out Combination	Slide-out Combination
Available Colors	Black	Black
Size (H" x W" x D") in	7.0" x 17" x 14.0"	14.88" x 17" x 14.0"
Weight	16 lbs.	20 lbs.
Material	.060" Powder Coated Aluminum	.060" Powder Coated Aluminum

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Slide-Out Style Splice Distribution Units Rack Mount Fiber Distribution Enclosures

Precision Rated Optics slide-out splice rack mounted termination enclosures are designed to provide connectivity and distribution solutions. Enclosures are supplied with universal mounting hardware for 19" or 23" mounting. Slide-out style splice enclosures are designed to support the storage of splice trays.



Part #	RM-ASL304-BA	RM-ASL408-BA
Splice Tray Capacity	(4)	(8)
Rack Unit	3	4
Adapter Capacity	(0) Panels	(0) Panels
Style	Slide-out Combination	Slide-out Combination
Available Colors	Black	Black
Size (H" x W" x D") in	5.25" x 17" x 14"	7" x 17" x 14"
Weight	14 lbs.	16 lbs.
Material	.060" Powder Coated Aluminum	.060" Powder Coated Aluminum

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Patch Panels and Rack/Wall Mount Rack Mount Patch Panel Fiber Distribution



Part #	RM-ABN103-BS	RM-ABS103-BS	RM-ADC103-BS
Splice Tray Capacity	N/A	N/A	(1)
Rack Unit	1	1	1
Adapter Capacity	(3) Panels	(3) Panels	(3) Panels
Style	Stationary	Stationary	Stationary
Available Colors	Black	Black	Black
Size (H" x W" x D") in	1.75" x 19" x 1"	1.75" x 19" x 8"	1.75" x 17" x 13.8"
Weight	1 lbs.	2 lbs.	16 lbs.
Material	.060" Powder Coated Steel	.060" Powder Coated Steel	.060" Powder Coated Steel

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Accessories

### Rack Mount Fiber Distribution Accessories



#### Lock & Key For Rack Mount Enclosures

For Lexan Doors of Rack Mount Enclosures  
Ask for 99534 to be installed on your rack mount enclosure

# 99534



#### Strain Relief Kit

Strain relief bracket for rack mount enclosures

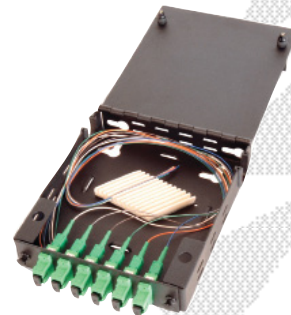
Diameter	.300 - .790"
Material:	Powder coated steel, rubber grommets
Grommets:	(1) .300 - .400", (1) .410 - .500", (1) .510 - .790"

# 065-151-10

## Standard Single Outer Door

### Wall Mount Fiber Distribution Enclosures

Precision Rated Optics wall mount enclosures are designed to provide connectivity and distribution solutions. Enclosures are divided into several groups to meet application specific requirements such as Construction Grade, Single Door, Dual Door, Added Security, NEMA 4 and NEMA 12. Units are available in standard Black or Off White unless specified



Part #	WM-AAA-0001-BS	WM-AAB-0001-BS
Adapter Capacity	(1) Panel	(1) Panel
Capacity	(1) Fiber spool	(12) Single splice holder
Color	Black	Black
Size (H x W x D) in	6.3" x 5.5" x 1.57"	6.3" x 5.5" x 1.57"
Material	18 GA steel	18 GA steel

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Standard Single Outer Door Construction Grade Wall Mount Fiber Distribution Enclosures

Precision Rated Optics wall mount enclosures are designed to provide connectivity and distribution solutions. Enclosures are divided into several groups to meet application specific requirements such as Construction Grade, Single Door, Dual Door, Added Security, NEMA 4 and NEMA 12. Units are available in standard Black or Off White unless specified



Part #	WM-ABA-0002-BS	WM-ABB-0004-BS	WM-ABC-0008-BS
Splice Tray Capacity	(2)	(4)	(8)
Adapter Capacity	(2) Panels	(4) Panels	(8) Panels
Style	Dual Door	Dual Door	Dual Door
Color	Black	Black	Black
Size (H x W x D) in	9.25" x 13" x 3.5"	11.5" x 13 x 3.5"	12" x 17" x 6"
Weight	7 lbs	8 lbs	15 lbs
Material	18 GA powder coated steel	18 GA powder coated steel	18 GA powder coated steel

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Standard Dual Door

### Wall Mount Fiber Distribution Enclosures

Precision Rated Optics wall mount enclosures are designed to provide connectivity and distribution solutions. Enclosures are divided into several groups to meet application specific requirements such as Construction Grade, Single Door, Dual Door, Added Security and NEMA ratings. Units are available in standard black unless specified.



Part #	WM-ADA-0002-BS	WM-ADB-0004-BS	WM-ADC-0009-BS
Splice Tray Capacity	(2)	(4)	(3)
Adapter Capacity	(2) Panels	(4) Panels	(9) Panels
Style	Dual Door	Dual Door	Dual Door
Color	Black	Black	Black
Size (H x W x D) in	10.2" x 12.5" x 3.5"	10.8" x 12" x 4"	17" x 21.2" x 5"
Weight	8 lbs	10 lbs	23 lbs
Material	16 GA powder coated steel	16 GA powder coated steel	16 GA powder coated steel

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Standard Lockable Dual Door

### Wall Mount Fiber Distribution Enclosures

Precision Rated Optics wall mount enclosures are designed to provide connectivity and distribution solutions. Enclosures are divided into several groups to meet application specific requirements such as Construction Grade, Single Door, Dual Door, Added Security and NEMA ratings. Units are available in standard black unless specified.



Part #	WM-ACA-0002-BS	WM-ACB-0004-BS
Splice Tray Capacity	(2)	(4)
Adapter Capacity	(2) Panels	(4) Panels
Style	Dual Door	Dual Door
Color	Black	Black
Size (H x W x D) in	10.2" x 12" x 3.5"	12" x 12" x 3.5"
Weight	8 lbs	9 lbs
Material	18 GA powder coated steel	18 GA powder coated steel

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Added Security Dual Door

### Wall Mount Fiber Distribution Enclosures

Precision Rated Optics wall mount enclosures are designed to provide connectivity and distribution solutions. Enclosures are divided into several groups to meet application specific requirements such as Construction Grade, Single Door, Dual Door and Added Security. Units are available in standard black unless specified.



Part #	WM-AEA-0002-BS	WM-AEB-0004-BS	WM-AEC-0008-BS
Splice Tray Capacity	(2)	(2)	(4)
Adapter Capacity	(2) Panels	(4) Panels	(8) Panels
Style	Added security dual door	Added security dual door	Added security dual door
Color	Black	Black	Black
Size (H x W x D) in	6" x 12" x 5.5"	11" x 14" x 4.5"	16" x 20" x 6.5"
Weight	8 lbs	12 lbs	24 lbs
Material	16 GA powder coated steel	16 GA powder coated steel	16 GA powder coated steel

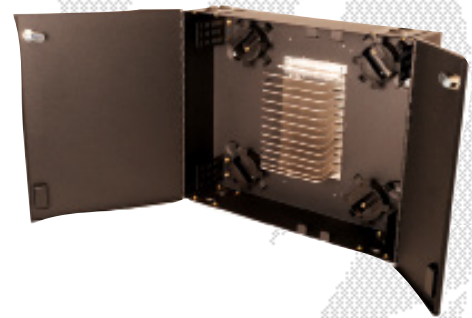
\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Optical Splice Enclosure

### Wall Mount Fiber Distribution Enclosures

The Precision Rated Optics Optical Splice Enclosure (OSE) is a wall mounted central splicing and cable management enclosure with a weather tight NEMA 4 design for indoor or outdoor applications. Depending on the tray selected, the enclosure supports up to 24F or 36F single fused fibers and if mass fusing, the enclosure can support >2000 mass fused fibers. Each splice tray incorporates the “open keyhole” hinging mechanism to allow for ease in tray entry without tray removal. The OSE is an enclosure that supports fiber splicing for wall mount applications.

- Polyester powder coat finish in standard black.
- All Corrosion resistant materials.
- Compact design with high splice storage capacity.
- Single outer and removable door.
- Top and bottom mounted cable entry plates supporting up to 8 liquid tight cable seals each.



Part #	WM-AFC-0016-BA	WM-AFB-0012-BS
Splice Tray Capacity	(16)	(12)
Adapter Capacity	N/A	N/A
Style	Wall Mount	Wall Mount
Color	Black	Black
Size (H x W x D) in	28" x 25.25" x 14.5"	17" x 21.1" x 5"
Weight	47 lbs	23 lbs
Material	.080 Aluminum	16 GA steel

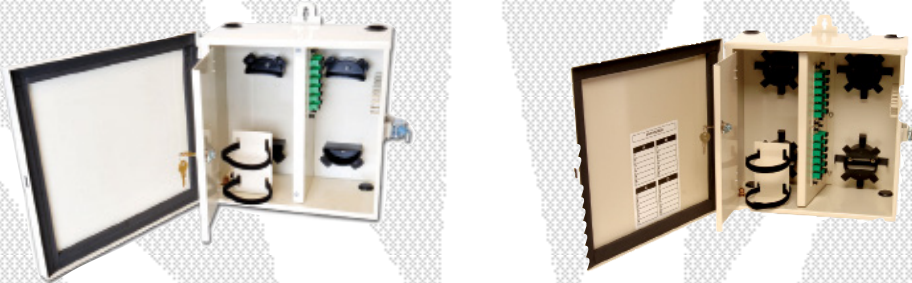
\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## NEMA Rated Dual Door

### Wall Mount Fiber Distribution Enclosures

Precision Rated Optics NEMA enclosures are constructed for either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts. They provide a degree of protection of the equipment inside the enclosure against ingress of falling dirt, windblown dust as well as harmful effects on the equipment due to the ingress of water (rain, sleet, snow, splashing water, and hose directed water). These enclosures will remain undamaged by the external formation of ice.

- Aluminum construction.
- Impact and weather resistance plastic.
- Polyester powder coat finish in standard tan
- All Corrosion resistant materials.



Part #	WM-AGA-0402-TA	WM-AGB-0404-TA
Splice Tray Capacity	(2)	(2)
Adapter Capacity	(2) Panels	(4) Panels
Style	NEMA wall mount	NEMA wall mount
Color	Tan	Tan
Size (H x W x D) in	13" x 13.7" x 5.75"	14" x 14" x 7"
Weight	12 lbs	14 lbs
Material	.08 powder coated aluminum	.08 powder coated aluminum

\*All enclosures ordered do not include adapter panels, splice trays or pigtails.



Part #	WM-AGC-0412-TA	WM-AHC-1306-GP
Splice Tray Capacity	(6)	(4)
Adapter Capacity	(12) Panels	(6) Panels
Style	NEMA wall mount	NEMA wall mount
Color	Tan	Grey
Size (H x W x D) in	22.4" x 19.5" x 10.5"	18" x 16" x 10"
Weight	16 lbs	10 lbs
Material	.08 powder coated aluminum	Impact and weather resistant plastic

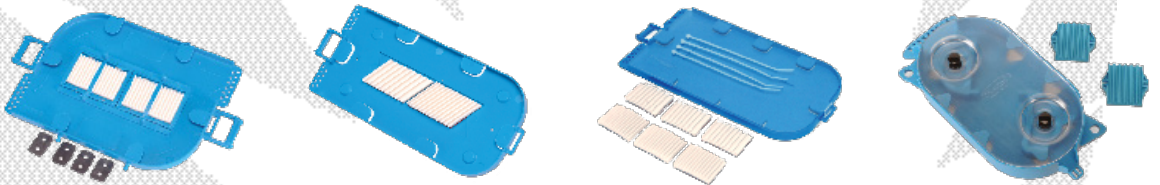
\*All enclosures ordered do not include adapter panels, splice trays or pigtails.

## Splice Trays

The Precision Rated Optics splice trays are universal to the industry. These trays are compatible with all of our enclosures. The splice trays provide protection and organization of fiber splices. Adhesive backed fiber insert holders and assorted cable ties included (grommets included on the 3030-SSTP).



Part #	ST-12AA0645S	ST-24AA1145S	ST-24AA0765S	ST-24AP1245S
<b>Description</b>	12 Single Fusion Splice Tray	24 Single Fusion Splice Tray	24 Single Fusion Splice Tray	24 Single Fusion Splice Tray
<b>Size (H x W x D) in</b>	6.5" x 4.75" x .5"	11.75" x 4" x .5"	7.75" x 6" x .5"	12.25" x 4" x .5"
<b>Weight</b>	Approx. 0.35 lbs.	Approx. 0.65 lbs.	Approx. 0.54 lbs.	Approx. 0.54 lbs.
<b>Capacity</b>	12 Single Fusion Splices	24 Single Fusion Splices	24 Single Fusion Splices	24 Single Fusion Splices
<b>Material</b>	Aluminum	Aluminum	Aluminum	Plastic Base w/ Aluminum Cover



Part #	ST-24PP0855S	ST-24PP0945S	ST-36PP1055S	ST-12PP0627S
<b>Description</b>	24 Single Fusion Splice Tray	24 Single Fusion Splice Tray	36 Single Fusion Splice Tray	12 Single Fusion Splice Tray
<b>Size (H x W x D) in</b>	8.25" x 5.75" x .5"	9.75 x 4.5" x .5"	10.75" x 5.75" x .5"	6" x 2.75" x .75"
<b>Weight</b>	Approx. 0.50 lbs.	Approx. 0.60 lbs.	vApprox. 0.60 lbs.	Approx. 0.10 lbs.
<b>Capacity</b>	24 Single Fusion Splices	24 Single or 48 Dual Stacked	36 Single, 72 Dual Stacked or 144 Mass Fusion	12 Single Fusion Splices
<b>Material</b>	Plastic	Plastic	Plastic	Plastic



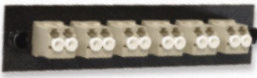


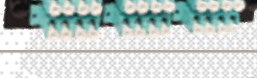



## Loaded Adapter Panels

	Part #	Conn. Type	# Of Conn.	Ferrell	Mode	Plate Color
	ADP-6SC-M6	SC	6	Ceramic	MM	Black
	ADP-8SC-M6	SC	8	Ceramic	MM	Black
	ADP-12SC-M6	SC	12	Ceramic	MM	Black
	ADP-6SC-UPC-SM	SC	6	Ceramic	SM	Black
	ADP-8SC-UPC-SM	SC	8	Ceramic	SM	Black
	ADP-12SC-UPC-SM	SC	12	Ceramic	SM	Black
	ADP-6SC-APC-SM	SC	6	Ceramic	SM	Black
	ADP-8SC-APC-SM	SC	8	Ceramic	SM	Black
	ADP-12SC-APC-SM	SC	6	Ceramic	SM	Black
	ADP-6SC-OM3	SC 10 GIG	6	Ceramic	MM	Black
	ADP-12SC-OM3	SC 10 GIG	12	Ceramic	MM	Black




















# ADAPTER PANELS

## Loaded Adapter Panels

ADAPTER PANELS

	Part #	Conn. Type	# Of Conn.	Ferrell	Mode	Plate Color
	ADP-12LC-M6	LC	12	Ceramic	MM	Black
	ADP-24LC-M6	LC	24	Ceramic	MM	Black
	ADP-12LC-UPC-SM	LC	12	Ceramic	SM	Black
	ADP-24LC-UPC-SM	LC	24	Ceramic	SM	Black
	ADP-12LC-OM3	LC 10 GIG	12	Ceramic	MM	Black
	ADP-24LC-OM3	LC 10 GIG	24	Ceramic	MM	Black
	ADP-6ST-M6	ST	6	Ceramic	MM	Black
	ADP-6ST-UPC-SM	ST	6	Ceramic	SM	Black
	ADP-8ST-M6	ST	8	Ceramic	MM	Black
	ADP-8ST-UPC-SM	ST	8	Ceramic	SM	Black
	ADP-12ST-M6	ST	12	Ceramic	MM	Black
	ADP-12ST-UPC-SM	ST	12	Ceramic	SM	Black
	ADP-6FC-M6	FC	6	Ceramic	MM	Black
	ADP-6FC-UPC-SM	FC	6	Ceramic	SM	Black
	ADP-8FC-M6	FC	8	Ceramic	MM	Black
	ADP-8FC-UPC-SM	FC	8	Ceramic	SM	Black
	ADP-12FC-M6	FC	12	Ceramic	MM	Black
	ADP-12FC-UPC-SM	FC	12	Ceramic	SM	Black
	ADP-12MTRJ-M6	MTRJ	6	Phos. Bronze	MM	Black

## Fiber Optic Adapters

	Stock ID	Type	Fiber Polish	Mode	Sleeve Material	Color	Foot Print
	CA-S-ST-M2SMB	ST	UPC	SM	Phos. Bronze	Chrome	ST
	CA-S-ST-S2SMZ	ST	UPC	MM	Zirconia	Chrome	ST
	CA-S-FC-M2SMB	FC	UPC	MM	Phos. Bronze	Chrome	FC
	CA-S-FC-S2SMZ	FC	UPC	SM	Zirconia	Chrome	FC
	CA-S-FC-A2SMZ	FC	APC	SM	Zirconia	Chrome	FC
	CA-S-SC-M6SPB	SC Simplex	UPC	MM	Phos. Bronze	Beige	SC Simplex
	CA-S-SC-M7DPB	SC Duplex	UPC	MM	Phos. Bronze	Beige	SC Duplex
	CA-S-SC-S6SPZ	SC Simplex	UPC	SM	Zirconia	Blue	SC Simplex
	CA-S-SC-S7DPZ	SC Duplex	UPC	SM	Zirconia	Blue	SC Duplex
	CA-S-SC-A6SPZ	SC Simplex	APC	SM	Zirconia	Green	SC Simplex
	CA-S-SC-A7DPZ	SC Duplex	APC	SM	Zirconia	Green	SC Duplex
	CA-S-SC-G6SPZ	SC Simplex 10 GIG	UPC	MM	Zirconia	Aqua	SC Simplex
	CA-S-SC-G7DPZ	SC Duplex 10 GIG	UPC	MM	Zirconia	Aqua	SC Duplex
	CA-S-MT-M6SPB	MTRJ	UPC	MM	Phos. Bronze	Black	MTRJ
	CA-S-LC-M6DPB	LC Duplex	UPC	MM	Phos. Bronze	Beige	LC Duplex
	CA-S-LC-M7QPB	LC Quad	UPC	MM	Phos. Bronze	Beige	SC Duplex
	CA-S-LC-S6DPZ	LC Duplex	UPC	SM	Zirconia	Blue	LC Duplex
	CA-S-LC-S7QPZ	LC Quad	UPC	SM	Zirconia	Blue	SC Duplex
	CA-S-LC-G6DPZ	LC Duplex 10 GIG	UPC	MM	Zirconia	Aqua	SC Simplex
	CA-S-LC-G7QPZ	LC Quad 10 GIG	UPC	MM	Zirconia	Aqua	SC Duplex

ADAPTERS

# Cable Assemblies

## Singlemode *9/125 μm UPC Patchcords 3mm*

### FC-FC SIMPLEX

PC-S-AFUFU01F	1 M
PC-S-AFUFU02F	2 M
PC-S-AFUFU03F	3 M
PC-S-AFUFU05F	5 M
PC-S-AFUFU10F	10 M

### LC-LC SIMPLEX

PC-S-ALULU01F	1 M
PC-S-ALULU02F	2 M
PC-S-ALULU03F	3 M
PC-S-ALULU05F	5 M
PC-S-ALULU10F	10 M

### SC-SC SIMPLEX

PCS-ACUCU01F	1 M
PCS-ACUCU02F	2 M
PCS-ACUCU03F	3 M
PCS-ACUCU05F	5 M
PCS-ACUCU10F	10 M

### ST-ST SIMPLEX

PC-S-ATUTU01F	1 M
PC-S-ATUTU02F	2 M
PC-S-ATUTU03F	3 M
PC-S-ATUTU05F	5 M
PC-S-ATUTU10F	10 M

### FC-FC DUPLEX

PC-S-DFUFU01F	1 M
PC-S-DFUFU02F	2 M
PC-S-DFUFU03F	3 M
PC-S-DFUFU05F	5 M
PC-S-DFUFU10F	10 M

### LC-LC DUPLEX

PC-S-DLULU01F	1 M
PC-S-DLULU02F	2 M
PC-S-DLULU03F	3 M
PC-S-DLULU05F	5 M
PC-S-DLULU10F	10 M

### SC-SC DUPLEX

PC-S-DCUCU01F	1 M
PC-S-DCUCU02F	2 M
PC-S-DCUCU03F	3 M
PC-S-DCUCU05F	5 M
PC-S-DCUCU10F	10 M

### ST-ST DUPLEX

PC-S-DTUTU01F	1 M
PC-S-DTUTU02F	2 M
PC-S-DTUTU03F	3 M
PC-S-DTUTU05F	5 M
PC-S-DTUTU10F	10 M

PATCHCORDS

## Singlemode *9/125 μm HYBRID UPC Patchcords 3mm*

### LC-SC SIMPLEX

PC-S-ALUCU01F	1 M
PC-S-ALUCU02F	2 M
PC-S-ALUCU03F	3 M
PC-S-ALUCU05F	5 M
PC-S-ALUCU10F	10 M

### LC-ST SIMPLEX

PC-S-ALUTU01F	1 M
PC-S-ALUTU02F	2 M
PC-S-ALUTU03F	3 M
PC-S-ALUTU05F	5 M
PC-S-ALUTU10F	10 M

### SC-ST SIMPLEX

PC-S-ACUTU01F	1 M
PC-S-ACUTU02F	2 M
PC-S-ACUTU03F	3 M
PC-S-ACUTU05F	5 M
PC-S-ACUTU10F	10 M

### LC-SC DUPLEX

PC-S-DLUCU01F	1 M
PC-S-DLUCU02F	2 M
PC-S-DLUCU03F	3 M
PC-S-DLUCU05F	5 M
PC-S-DLUCU10F	10 M

### LC-ST DUPLEX

PC-S-DLUTU01F	1 M
PC-S-DLUTU02F	2 M
PC-S-DLUTU03F	3 M
PC-S-DLUTU05F	5 M
PC-S-DLUTU10F	10 M

### SC-ST DUPLEX

PC-S-DCUTU01F	1 M
PC-S-DCUTU02F	2 M
PC-S-DCUTU03F	3 M
PC-S-DCUTU05F	5 M
PC-S-DCUTU10F	10 M

## Singlemode *9/125 μm APC Patchcords 3mm*

### FC-FC SIMPLEX

PC-S-AFAFA01F	1 M
PC-S-AFAFA02F	2 M
PC-S-AFAFA03F	3 M
PC-S-AFAFA05F	5 M
PC-S-AFAFA10F	10 M

### LC-LC SIMPLEX

PC-S-ALALA01F	1 M
PC-S-ALALA02F	2 M
PC-S-ALALA03F	3 M
PC-S-ALALA05F	5 M
PC-S-ALALA10F	10 M

### SC-SC SIMPLEX

PCS-ACACA01F	1 M
PCS-ACACA02F	2 M
PCS-ACACA03F	3 M
PCS-ACACA05F	5 M
PCS-ACACA10F	10 M

### FC-FC DUPLEX

PC-S-DFAFA01F	1 M
PC-S-DFAFA02F	2 M
PC-S-DFAFA03F	3 M
PC-S-DFAFA05F	5 M
PC-S-DFAFA10F	10 M

### LC-LC DUPLEX

PC-S-DLALA01F	1 M
PC-S-DLALA02F	2 M
PC-S-DLALA03F	3 M
PC-S-DLALA05F	5 M
PC-S-DLALA10F	10 M

### SC-SC DUPLEX

PCS-DCACA01F	1 M
PCS-DCACA02F	2 M
PCS-DCACA03F	3 M
PCS-DCACA05F	5 M
PCS-DCACA10F	10 M

# Cable Assemblies

## Multimode *50/125 μm UPC Patchcords 3mm*

### FC-FC SIMPLEX

PC-N-AFUFU01F	1 M
PC-N-AFUFU02F	2 M
PC-N-AFUFU03F	3 M
PC-N-AFUFU05F	5 M
PC-N-AFUFU10F	10 M

### LC-LC SIMPLEX

PC-N-ALULU01F	1 M
PC-N-ALULU02F	2 M
PC-N-ALULU03F	3 M
PC-N-ALULU05F	5 M
PC-N-ALULU10F	10 M

### SC-SC SIMPLEX

PC-N-ACUCU01F	1 M
PC-N-ACUCU02F	2 M
PC-N-ACUCU03F	3 M
PC-N-ACUCU05F	5 M
PC-N-ACUCU10F	10 M

### ST-ST SIMPLEX

PC-N-ATUTU01F	1 M
PC-N-ATUTU02F	2 M
PC-N-ATUTU03F	3 M
PC-N-ATUTU05F	5 M
PC-N-ATUTU10F	10 M

### FC-FC DUPLEX

PC-N-DFUFU01F	1 M
PC-N-DFUFU02F	2 M
PC-N-DFUFU03F	3 M
PC-N-DFUFU05F	5 M
PC-N-DFUFU10F	10 M

### LC-LC DUPLEX

PC-N-DLULU01F	1 M
PC-N-DLULU02F	2 M
PC-N-DLULU03F	3 M
PC-N-DLULU05F	5 M
PC-N-DLULU10F	10 M

### SC-SC DUPLEX

PC-N-DCUCU01F	1 M
PC-N-DCUCU02F	2 M
PC-N-DCUCU03F	3 M
PC-N-DCUCU05F	5 M
PC-N-DCUCU10F	10 M

### ST-ST DUPLEX

PC-N-DTUTU01F	1 M
PC-N-DTUTU02F	2 M
PC-N-DTUTU03F	3 M
PC-N-DTUTU05F	5 M
PC-N-DTUTU10F	10 M

## Multimode *HYBRID 50/125 μm UPC Patchcords 3mm*

### LC-SC SIMPLEX

PC-N-ALUCU01F	1 M
PC-N-ALUCU02F	2 M
PC-N-ALUCU03F	3 M
PC-N-ALUCU05F	5 M
PC-N-ALUCU10F	10 M

### LC-ST SIMPLEX

PC-N-ALUTU01F	1 M
PC-N-ALUTU02F	2 M
PC-N-ALUTU03F	3 M
PC-N-ALUTU05F	5 M
PC-N-ALUTU10F	10 M

### SC-ST SIMPLEX

PC-N-ACUTU01F	1 M
PC-N-ACUTU02F	2 M
PC-N-ACUTU03F	3 M
PC-N-ACUTU05F	5 M
PC-N-ACUTU10F	10 M

### LC-SC DUPLEX

PC-N-DLUCU01F	1 M
PC-N-DLUCU02F	2 M
PC-N-DLUCU03F	3 M
PC-N-DLUCU05F	5 M
PC-N-DLUCU10F	10 M

### LC-ST DUPLEX

PC-N-DLUTU01F	1 M
PC-N-DLUTU02F	2 M
PC-N-DLUTU03F	3 M
PC-N-DLUTU05F	5 M
PC-N-DLUTU10F	10 M

### SC-ST DUPLEX

PC-N-DCUTU01F	1 M
PC-N-DCUTU02F	2 M
PC-N-DCUTU03F	3 M
PC-N-DCUTU05F	5 M
PC-N-DCUTU10F	10 M

## Multimode *50/125 μm 10 Gig UPC Patchcords 3mm*

PRO offers 10 Gigabit duplex 1.6mm multimode 50μm Patchcords perfect for upgrading your network. Operating distance of 300 meters using laser optimized InfiniCor SX + multimode fiber. PRO 10 Gigabit assemblies are designed to run advanced applications, meet IEEE 802.3 specifications and offer superior connector polish. Other configurations available upon request.

### LC-LC DUPLEX

PC-L-DLULU01F	1 M
PC-L-DLULU02F	2 M
PC-L-DLULU03F	3 M
PC-L-DLULU05F	5 M
PC-L-DLULU10F	10 M

### LC-SC DUPLEX

PC-L-DLUCU01F	1 M
PC-L-DLUCU02F	2 M
PC-L-DLUCU03F	3 M
PC-L-DLUCU05F	5 M
PC-L-DLUCU10F	10 M

### SC-ST DUPLEX

PC-L-DCUTU01F	1 M
PC-L-DCUTU02F	2 M
PC-L-DCUTU03F	3 M
PC-L-DCUTU05F	5 M
PC-L-DCUTU10F	10 M

### SC-SC DUPLEX

PC-L-DCUCU01F	1 M
PC-L-DCUCU02F	2 M
PC-L-DCUCU03F	3 M
PC-L-DCUCU05F	5 M
PC-L-DCUCU10F	10 M

### ST-ST DUPLEX

PC-L-DTUTU01F	1 M
PC-L-DTUTU02F	2 M
PC-L-DTUTU03F	3 M
PC-L-DTUTU05F	5 M
PC-L-DTUTU10F	10 M

# Cable Assemblies

## Multimode *62.5/125 μm UPC Patchcords 3mm*

### FC-FC SIMPLEX

PC-M-AFUFU01F	1 M
PC-M-AFUFU02F	2 M
PC-M-AFUFU03F	3 M
PC-M-AFUFU05F	5 M
PC-M-AFUFU10F	10 M

### LC-LC SIMPLEX

PC-M-ALULU01F	1 M
PC-M-ALULU02F	2 M
PC-M-ALULU03F	3 M
PC-M-ALULU05F	5 M
PC-M-ALULU10F	10 M

### SC-SC SIMPLEX

PC-M-ACUCU01F	1 M
PC-M-ACUCU02F	2 M
PC-M-ACUCU03F	3 M
PC-M-ACUCU05F	5 M
PC-M-ACUCU10F	10 M

### ST-ST SIMPLEX

PC-M-ATUTU01F	1 M
PC-M-ATUTU02F	2 M
PC-M-ATUTU03F	3 M
PC-M-ATUTU05F	5 M
PC-M-ATUTU10F	10 M

### FC-FC DUPLEX

PC-M-DFUFU01F	1 M
PC-M-DFUFU02F	2 M
PC-M-DFUFU03F	3 M
PC-M-DFUFU05F	5 M
PC-M-DFUFU10F	10 M

### LC-LC DUPLEX

PC-M-DLULU01F	1 M
PC-M-DLULU02F	2 M
PC-M-DLULU03F	3 M
PC-M-DLULU05F	5 M
PC-M-DLULU10F	10 M

### SC-SC DUPLEX

PC-M-DCUCU01F	1 M
PC-M-DCUCU02F	2 M
PC-M-DCUCU03F	3 M
PC-M-DCUCU05F	5 M
PC-M-DCUCU10F	10 M

### ST-ST DUPLEX

PC-M-DTUTU01F	1 M
PC-M-DTUTU02F	2 M
PC-M-DTUTU03F	3 M
PC-M-DTUTU05F	5 M
PC-M-DTUTU10F	10 M

## Multimode *HYBRID 62.5/125 μm UPC Patchcords 3mm*

### LC-SC SIMPLEX

PC-M-ALUCU01F	1 M
PC-M-ALUCU02F	2 M
PC-M-ALUCU03F	3 M
PC-M-ALUCU05F	5 M
PC-M-ALUCU10F	10 M

### LC-ST SIMPLEX

PC-M-ALUTU01F	1 M
PC-M-ALUTU02F	2 M
PC-M-ALUTU03F	3 M
PC-M-ALUTU05F	5 M
PC-M-ALUTU10F	10 M

### SC-ST SIMPLEX

PC-M-ACUTU01F	1 M
PC-M-ACUTU02F	2 M
PC-M-ACUTU03F	3 M
PC-M-ACUTU05F	5 M
PC-M-ACUTU10F	10 M

### LC-SC DUPLEX

PC-M-DLUCU01F	1 M
PC-M-DLUCU02F	2 M
PC-M-DLUCU03F	3 M
PC-M-DLUCU05F	5 M
PC-M-DLUCU10F	10 M

### LC-ST DUPLEX

PC-M-DLUTU01F	1 M
PC-M-DLUTU02F	2 M
PC-M-DLUTU03F	3 M
PC-M-DLUTU05F	5 M
PC-M-DLUTU10F	10 M

### SC-ST DUPLEX

PC-M-DCUTU01F	1 M
PC-M-DCUTU02F	2 M
PC-M-DCUTU03F	3 M
PC-M-DCUTU05F	5 M
PC-M-DCUTU10F	10 M

### SPECIFICATIONS *Singlemode UPC*

Insertion Loss	≤0.5 dB
Back Reflection	-50 dB

### SPECIFICATIONS *Multimode UPC*

Insertion Loss	≤0.5 dB
Back Reflection	-25 dB

### SPECIFICATIONS *Singlemode APC*

Insertion Loss	≤0.5 dB
Back Reflection	-60 dB

*\*Different cable diameters available upon request!*

PATCHCORDS

# PRO Cert™

## Certification Training

### Training through the Fiber School

- Our instructors are field-experienced, not just classroom-smart
- Our material features practical, real-world lab exercises
- Our courses provide certification testing of your practical knowledge
- Convenient locations nationally and internationally



### Regularly Scheduled Courses:

- **Installer Courses** - These courses are designed to provide a basic introduction to theory, standard practices and codes. These courses provide students with hands on, real world lab exercises and certification is available upon successful completion of the course.
- **Technician Courses** - Technician courses build on the foundation gained in the installer course. This training is ideal for experienced installers. This course features advanced procedures and techniques
- **Master Courses** - Master courses are for students that have several years of field experience or have completed the required installer and technician courses. These courses focus on design, preparation and advanced hands on labs.
- **Wireless and Security** - From Ethernet Backhaul, security camera and wireless courses, our courses span both physical and protocol layers.

### Online courses:

Training via our e-learning software is easy and affordable. For professionals with limited time and travel ability, our fundamental courses are offered online for your convenience.

### On-Site:

For companies that have 8 or more students that need to be trained, on-site training is the perfect solution. Convenient and flexible we provide the instructor, equipment and materials. Reduce your travel expenses and increase your staff's productivity with training provided at your location.



### Custom Courses:

Don't see a course that fits your exact needs? With our custom training options you can have the course topic you want. From broad perspective to a focus on a product or procedure let us work with you to customize the training that fits your exact specifications.

Our goal is to provide your company with the best training experience possible. We use the latest equipment, top instructors and course material that is not only practical is critical to your success. If you have any questions please contact:

# PRO Serv™

## Fiber Optic Services

### Fiber Characterization

Whether you need to optimize an existing network or are planning an overbuild, new build or upgrade, fiber characterization is a crucial first step. Typical testing includes: Chromatic Dispersion (CD) Testing, Polarization Mode Dispersion (PMD) Testing, Optical Time Domain Reflectometer (OTDR) Testing, Optical Return Loss (ORL) Testing, and Optical Channel Analysis (OCA). Regardless of your end goals, a well-designed network relies upon accurate fiber characterization to operate efficiently and reduce downtime.



### Splicing

Using only the latest and best equipment in the industry, PRO-Serv's engineers perform splicing operations around the world.

### FTTx Services

Field engineers are available to support either aerial or underground FTTx installations nationwide.

### Engineering

If your project requires CAD images, Visio documents or just a hand drawing, our trained and certified staff will make the appropriate recommendations and assist with the project completion.

### Emergency Restoration

When disaster strikes, PRO-Serv can step in to restore critical data pathways and get your customers up and running again. PRO-Serv can also help your company develop and initiate a comprehensive Preventive Maintenance Program (PMP) as well as Emergency Response Plans (ERP) to reduce downtime due to unpredictable outages.

### Other Services Include:

- Network Mapping
- Mechanical Repair
- Annual Cleaning, Documentation and Certification
- Maintenance
- Backbone, NAP and NID Splicing
- OTDR, PM & LS Testing

*And much more!!*

Give us a call to find out how PRO-Serv can help you!

**888-545-1254**



## Product Selection Tool

### Fiber Test and Troubleshooting Instruments

	Optical Loss Test Set	Visual Fault Locator	Optical Fiber Identifier	OTDR	Video Inspection Probe	Optical Loss Multimeter	Optical Break/Fault Locator
Inspect end-face contamination and/or damage?				X	X		
Analyze connectivity?	X	X	X	X			
Analyze polarity?	X	X	X				
Bi-directional testing?	X			X			X
Identifying fiber/connectors?		X	X				
Measure Attenuation?	X			X		X	
Locate breaks/faults?		X		X			X
Verify continuity?							
Inspection of installed connectors?		X					
Pass/fail results?				X			
Routine Maintenance?					X		X
Data Storage?				X		X	
Fiber types supported?	SM/MM	SM/MM	MM	SM/MM	SM/MM	SM/MM	SM
Source type?	Laser & LED	Laser & LED	LED	Laser & LED	Laser & LED	Laser & LED	Laser

	Optical Power Meter 100 Series	Optical Power Meter 200 Series	Optical Light Source 100 Series	Optical Light Source 200 Series	Fusion Splicer	PON Meter
Inspect end-face contamination and/or damage?						
Analyze connectivity?						
Analyze polarity?						
Bi-directional testing?	X	X	X	X		
Identifying fiber/connectors?	X	X	X	X	X	
Measure Attenuation?	X	X			X	X
Locate breaks/faults?						
Verify continuity?	X	X				
Inspection of installed connectors?						
Pass/fail results?						
Routine Maintenance?						X
Data Storage?						
Fiber types supported?	SM/MM	SM/MM	SM/MM	SM	SM	SM
Source type?	Laser & LED	Laser & LED	Laser & LED	Laser	Laser	Laser



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