Precision Rated Optics

Work with a PRO!

2014
Product Catalog

www.PrecisionRatedOptics.com

Designed, Developed, Manufactured, Sold, Serviced and Supported in the USA!

Throughout the Precision Rated Optics line of products you will find many that proudly display the "Made in America" logo. There are many solid reasons why PRO has sought to bring American-made products to the fiber optics industry, but in the end it comes down to "job creation," which equals "quality products" and "local support."

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.

Our American-made tools are designed and built to be the best in the industry and to consistently deliver results at a competitive price.

At PRO we aim high and we strive to keep your dollars where they belong - here in America. Although not every single product in our line can carry the "Made in America" logo, you can be sure we're working hard to make that a reality.

That will continue to be our promise to you as we endeavor to build our solid reputation - one customer at a time.

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

Thank you for choosing our products and for supporting America's economy!
Together we'll get the job done.

Sincerely,

Thomas DePaolantonio
President, Precision Rated Optics

Precision Rated Optics
Work with a PRO!

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LEGAL NOTICE

All products are sold FOB shipping point. Items will be shipped UPS ground, freight collect or third-party bill unless otherwise requested by purchaser. Please advise method of shipment and preferred carrier when order is placed. We discourage mandatory carrier requirements which have an adverse effect on service and delivery. Check your order immediately upon arrival. All damages must be noted on delivery receipt. Any claims for damage or loss of items while in transit must be filed with the carrier.

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, PO Box 877 Trexlertown, PA 18087

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.

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730 *Fusion Splicer*

PRECISION RATED OPTICS

The PRO-730 Core-Alignment Fusion Splicer can handle SM, MM, DS, NZ-DS and EDF fiber. With an 8-second splice time, the ability to handle from 2-22mm fiber, the PRO-730 is an extremely capable Fusion Splicer.

Whether your application is Premise, OSP or FTTx, splicing with the PRO-730 will get the job done quickly and efficiently, and can store up to 8,000 splice results, tranferrable to PC via a USB port. The PRO-790 features a reversible monitor and simultaneous X and Y views for maximum convenience.

The PRO-730 is CE and RoHS compliant and with a battery capacity that allows for 200 splicing operations (including heating), you can splice all day long on a single charge. The PRO-730 is sold, serviced and supported in the USA, is CE and RoHS compliant and comes with a 1-year manufacturer's warranty.

- Reversible Monitor with Control Panel on Each Side
- 8 Sec. Splice Time
- Simultaneous X and Y Views
- Auto-Calibrate Parameters
- Storage for 8,000 Groups of Splice Results

SPECIFICATIONS

Applicable Fibers	SM, MM, DS, NZ-DS, EDF
Fiber Diameters	Cladding Diameter: 100 ~ 150μm, Coating Diameter: 100 ~ 1,000μm
Cleave Length	2-22mm (Adjustable) 16mm (Recommended)
Average Splice Loss	0.02dB (SM), 0.01dB (MM), 0.04dB (DS), 0.04 (NZDS)
Tension Test	2.0N (Standard)
Monitor	Color 4.25" diagonal LCD @ 256x magnification
Splice Time	8 Seconds, Typically 2.5 sec
Heater Time	40mm: 20sec / 60mm: 30sec
Camera Axis	X axis & Y axis
Languages	English, Spanish, Chinese
Interface	RS232
Splice Programs	15 Groups (Preset), 1 Group (User-Defined)
Data Storage	8,000 Splice Results
Power Supply	200 Splicing/Heating Operations, +12V DC Adaptor
Operating Temp.	-13°F ~ 122°F (-25°C ~ 5°C)
Environmental Conditions	0 ~ 95% (Humidity), 0 ~ 5000m (Altitude), 15 mph (Max Wind Velocity)
Weight & Dimensions (LxWxH)	6.5" x 5.5" x 6.5" / 7.25 lb (165 x 140 x 165 mm / 3.3 kg)
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)

730 Fusion Splicer Standard Package Includes:

Splicer, Cleaver, Spare Electrodes, AC Adaptor/Battery Charger, AC Power Cord, Cooling Tray, Fiber Strippers, Monitor Cover, Manual, Quick Guide, Hard Case

Ordering Information

PRO-730	Core Alignment Optical Fusion Splicer (PAS)

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

790 *Fusion Splicer*

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

The PRO-790 has an 8-Second splice time, 3.5" LCD monitor and is ruggedized for heavy field use. With an onboard oven capable of accomodating 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 and carrying case.

- ● Compact and Ruggedized
- ● Color, 3.5" LCD Monitor
- ● PAS Technology
- ● 8-Second Splice Time
- ● USB Interface for Data Transfer

SPECIFICATIONS

Applicable Fibers	SM, MM, DS, NZ-DS (G655), G655, G657
Fiber Diameter	Cladding Diameter: 80 -150μm; Coating Diameter: 100~1,000μm
Average Splice Loss	0.01db (MM), 0.02db (SM), 0.05db (DS/NZDS/G.655/G.657)
Return Loss	60dB
Tension Test	2.0N (Standard)
Splice Time	8 Seconds
Sleeve Lengths	25mm, 40mm, 50mm
Sleeve Heating Time	35 Sec.
Splicing Programs	Manual and Automatic Settings
Alignment	PAS Technology
Fiber Holder (Bare Fiber)	250μm ~ 900μm, Pigtails, Patch Cords or Optical Fiber Drop Cables
Monitor	3.5" Color LCD
Interface	USB
Languages	English, Spanish, Chinese
Data Storage	10,000 Splice Results
Electrode Lifespan	5,000 Splicing Operations
Operating Temperature	-0.4° F ~ 122° F (-18° C ~ 50° C)
Storage Temperature	-40° F ~ 176° F (-40° C ~ 80° C)
Power Supply	Internal Li-Ion Battery, AC/DC Adaptor (12v) Battery Capacity: Approximately 120 Splices and Oven Uses
Environmental Conditions	0 ~ 95% (Humidity), 0 ~ 5000m (Altitude), 15mph (Max. Wind Velocity)
Weight & Dimensions (LxWxH)	4.7" x 4.7" x 4.5" / 3.75 lb (120 x 120 x 115 mm / 1.7 kg)
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)

790 Fusion Splicer Standard Package Includes:

Fusion Splicer, AC/DC Charger/Adaptor, Spare Electrodes, Cooling Tray, Carry Case, Fiber Cleaver, Fiber Strippers, Fiber Holders, Operating Manual

Ordering Information

PRO-790	Core-Alignment Optical Fusion Splicer (PAS) w/Splice-On Connectors

PRECISION RATED OPTICS

810 *Fusion Splicer*

The PRO-810 Core-Alignment Fusion Splicer is a competively-priced, ruggedized, reliable splicer that incorporates a user-friendly interface and includes a standard list of features rarely found on splicers at this price point. The rugged construction is perfect for harsh working conditions, whether it's Premise, OSP or FTTx.

Extremely user-friendly, the PRO-810 features a 5" HD LCD monitor, allowing for front or rear splicer orientation. Additionally, the PRO -810 is FiberBase-compatible, allowing aplice results to be uploaded and integrated into the FiberBase network management software for permanent storage and retrieval.

Sold, serviced and supported in the USA, the PRO-810 is CE and RoHS compliant, competitvely priced and backed by a 1-year manufacturer warranty.

- 8-Second Splice Time
- Dual Heaters
- Dual-Axis-View Monitor
- 5" HD LCD Color Display
- High-Capacity Li-ion Battery

SPECIFICATIONS

Applicable Fibers	SM, MM, DS, NZ-DS (G655), EDF and Others
Fiber Diameter (μm)	Cladding Diameter: 100~150 μm Coating Diameter: 100~1,000 μm
Fiber Cleave Length	13-16mm (Adjustable) 16mm (Recommended)
Splicing Modes	Auto & Manual
Average Splice Loss	0.02dB (SM), 0.01dB (MM). 0.04dB (NZDS)
Return Loss	≥60dB
Tension Tests	2.0N (200gf) (Standard)
Monitor	Color, 5" Diagonal HD LCD, 360x Magnification
Sleeve Lengths	20mm, 40mm, 60mm and Other Series' Micro Protection Sleeves
Splice Programs	80 Groups
Languages	English, Korean, Russian, Spanish , French, Portuguese and Others
Interface	USB Interface - Updates & Data Transfer
Power Supply	12V AC/DC Adaptor/Charger, 12V Li-ion (10Ah)	200 Splicing Operations
Operating Temperature	-13°F ~ 122°F (-25°C ~ 50°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Environmental Conditions	0 ~ 95%RH (Humidity) 0 ~ 4000m (Altitude)
Weight & Dimensions (LxWxH)	5.75" x 5.90" x 6.29" / 7.3 lb (146 x 150 x 160 mm / 3.3 kg)
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)

810 Fusion Splicer Standard Package Includes:

Fusion Splicer, 12V Li-ion Battery, AC/DC Adaptor/Charger, Spare Electrodes, Cooling Tray, User Manual, Fiber Cleaver, FiberStripper, Carrying Case

Ordering Information

PRO-810	Core-Alignment Optical Fusion Splicer (PAS)

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

OFS-950S

All-in-One Core-Alignment Optical Fusion Splicer

The Precision Rated Optics OFS-950S All-in-One, Core-Alignment Fusion Splicer has quickly become one of PRO's most popular splicers. The touchscreen 950S accepts Splice-On-Connectors and has an automatic thermal stripper, cleaner dispenser, one-step precision cleaver and dual-oven heater right onboard!

With a splicing time of only 9 seconds, a tube heating time of just over 20 seconds and battery capacity of over 320 splicing operations, the 950S is the "Swiss Army Knife" of splicers and is rapidly becoming the "must-have" tool for fiber technicians.

The OFS-950S also boasts a 4.3" touchscreen color monitor and can splice any single fiber, singlemode or multimode fiber as well as Splice-On-Connectors! Sold, serviced and supported in the USA, the OFS-950S includes a 1-year manufacturer's warranty, spare electrodes and a carrying case.

RoHS ✓ COMPLIANT

- All-in-One Design
- Navigational Touch-Screen with 4.3" Color Monitor
- 250µm/900um Micron Fiber Holders
- Thermal Stripper
- Long Battery Life (More than 320 Charge Cycles)
- Water, Dust and Shock Resistant
- Attached Sleeve Loader
- Dual-Sleeve Heater
- Compatible with SOC Connectors (Optional)

OFS-950S Standard Package Includes:

Fusion Splicer with Auto Stripper, Cleaner Unit and Cleaver, AC/DC Adaptor/Charger, Sleeve Loader, Spare Electrodes, Battery Pack, Cooling Tray, User Manual, Carrying Case

SPECIFICATIONS

Alignment	IPAS Core-to-Core Alignment (Image Pattern Analysis Alignment System)
Applicable Type of Fibers	SMF (ITU-T G.652), MMF (ITU-T G.651), DSF (ITU-T G.653), NZDSF (ITU-T G.655), EDFA, EI980, Splicing Available with Various Fiber Types (SM/MM), ITU-T G.657
Applicable Fiber Dimensions	Single: Cladding Diameter 80µm ~ 150µm , Coating Diameter 100µm ~ 1,000µm
Fiber Setting and Cleaved Length	250µm (Coated): 8 ~ 16mm, 900µm: 16mm
Typical Splice Loss	SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04dB, NZDSF: 0.04dB
Return Loss	> -60dB
Splicing Times	Splicing: Typically 9 sec. Tube Heat: Typically 20 ~ 26 sec with S-160 (60mm) Tube
Splice Results	Last 2,000 Results (Image: 100 Results)
Operating Altitude	0 ~ 5000m Above Sea Level
Ports	USB, RCA, External Power
Power Supply	DC 14.8V Lithium Polymer Batteries (7700mAh), 100 ~ 240V AC Adaptor
Battery Capacity	320 Splicing Operations
Electrode Lifespan	> 2,000 Splicing Operations
Mechanical Proof Tests	2N / 4.4N (OPTIONAL)
Display	Two CMOS Cameras and 4.3" Color LCD Monitor with Touch-Screen
Fiber View and Magnification	X/Y 300X, 170X
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Environmental Conditions	0 ~ 95%RH (Humidity) 0 ~ 5000m (Altitude)
Weight & Dimensions (LxWxH)	5.5" x 8.8" x 4.9" / 6.5 lb (140 x 225 x 125 mm / 2.95 kg)

Ordering Information

OFS-950S	Fusion Splicer (PAS)

SPLICERS

OFS-950R

All-in-One Ribbon Fusion Splicer

PRECISION RATED OPTICS

The increasingly popular OFS-950R "All-in-One" Ribbon Fusion Splicer has a 12-fiber ribbon holder, and can strip, clean, cleave, splice and sleeve. It is compatible with Splice-On-Connectors, and the Lithium Polymer battery can achieve 320 splicing operations on a single charge.

A built-in thermal stripper eliminates the possibility of scratching the fiber, and the unit is water, dust and shock resistant. The OFS-950 comes standard with 250μm and 900μm fiber holders and dual sleeve heaters. The compact design eliminates the need for a large work space, and the large, 4.3" LCD touchscreen makes splicing operations fast and efficient.

Sold, serviced and supported in the USA, the OFS-950R is RoHS compliant and comes with a 1-year manufacturer's warranty, spare electrodes, ribbon holders and a hard carrying case.

RoHS ✓ COMPLIANT

- 12-Fiber Ribbon Splicing / "All-in-One" Design
- Navigational Touchscreen with 4.3" Color Monitor
- Water, Dust and Shock Resistant
- High-Capacity Lithium Polymer Battery (320 Splicing Operations)
- Compatible with SOC Connectors (Optional)

SPECIFICATIONS

Applicable Type of Fibers	SM (ITU-T G.652), MM (ITU-T G.651), DS (ITU-T G.653), NZDS (ITU-T G.655)
Fiber Count	Single Fiber, 2 ~ 12 Fibers
Applicable Fiber Dimensions	Single Cladding Diameter 125μm, Single Coating Diameter 250μm, 900μm Ribbon Cladding Diameter 125μm, Ribbon Fiber Thickness 0.27 ~ 0.32mm
Fiber Cleaved Length	8mm
Splicing Modes	100 Splice Modes, 50 Heat Modes
Typical Splice Loss	SM: 0.05dB, MM: 0.02dB, DS: 0.08dB, NZDS: 0.08dB
Return Loss	> 60dB
Splicing Time	Typically 20 sec with Standard SM (ITU-T G.652)
Sleeve Heating Time	35 sec
Sleeve Lengths	45mm (Fiber), 28mm or 32mm (Connector)
Storage of Splice Results	1,000 Splice Results / 100 Image Results
Tension Tests	2N
Display	4.3" Color LCD Touchscreen Monitor
Cameras	Dual CMOS
Fiber View and Magnification	X/Y | 300X/170X
Ports	USB, External Power
Power Supply	DC 14.8V Lithium Polymer (7,700mAh)
Additional Power (Optional)	DC 12V (Vehicle Accessory Port)
Battery Capacity	320 Splicing/Heating Cycles
Electrode Life	> 1,000 Splicing Operations
Operating Temp.	14°F ~ 122°F (-10°C ~ 50°C)
Storage Temp.	-40°F ~ 176°F (-40°C ~ 80°C)
Environmental Conditions	0 ~ 95% (Humidity), 0 ~ 660m (Altitude), 15mph (Max. Wind Velocity), Non-Condensing, Dust Proof, Shock Proof
Weight & Dimensions (LxWxH)	5.5" x 8.85" x 4.9" / 5 lb (140 x 225 x 125 mm / 2.3 kg)

OFS-950R Standard Package Includes:

Fusion Splicer, AC Adaptor, Sleeve Loader, Spare Electrodes, 250/900 Micron / 12-Ribbon Fiber Holders, Battery Pack, Cooling Tray, Holder, Tool Box, User Manual, Carrying Case

Also Available: Ribbon Holders for 2, 4 or 8-Fiber Ribbon

Ordering Information

OFS-950R	Splicer, Thermal Stripper, Cleaver & Alcohol Dispenser

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

OFS-900

FTTH Fusion Splicer

The Precision Rated Optics OFS-900 Fixed V-Groove Fusion Splicer has been specifically designed and optimized for FTTH applications. Its super-ruggedized rain, dust and shock-resistant design means the OFS-900 can easily tolerate harsh working conditions that would instantly disable lesser units.

The ability to accommodate Splice-on-Connectors means you'll work more efficiently. Boasting a 20 Second heating time and a 7 Second splicing time, you'll work faster than ever, saving time and money.

Optimized for those working in FTTH applications, the all-new OFS-900 packs a punch, adding huge functionality to your toolbox at an incredibly competitive price point.

- Compact Design for Tight Workspaces
- Applicable for SOC (Splice-on-Connectors)
- Water, Dust and Shock Resistant
- Efficient Two-Heater System
- Competitvely Priced

SPECIFICATIONS

Fiber Alignment	Fixed V-Groove (Clad-to-Clad)
Cladding Diameter	125μm
Coating Diameter	250μm ~ 900μm
Average Loss Ratio	0.03dB (SM), 0.02dB (MM), 0.06dB (NZDS, DS)
Splicing Time	7 sec
Sleeve Heating Time	20 sec (0.9mm), 70 sec (Indoor, 3.0mm)
Sleeve Lengths	60mm / 40mm
Tensile Strength	1.96N
Data Storage	2,000 Splicing Operations
Cables	0.25mm, 0.9mm, 2.0mm, 3.0mm (Indoor Cable)
Weight	1.2 Kg (Including Rubber Boot and Batteries)
Power Supply	DC Li-Polymer Battery, 100~240V AC Adaptor
External Power	DC 12V (Vehicle Accessory Jack)
Battery Capacity	1400 mAh (x2)
Battery Lifespan	Typically 140 Cycles (0.9mm fiber)
Operating Temperature	-10°F ~ 122°F (-10°C ~ 50°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Weight & Dimensions (LxWxH)	5.5" x 7" x 3.4" (140 x 179 x 87mm)

OFS-900 Standard Package Includes:

Fusion Splicer, AC Adaptor, Battery Charger, DC Li-Polymer Battery, 250μm Fiber Holders, Spare Electrode, Cooling Tray, Precision Cleaver, Manual Stripper, SOC Fiber Holder, Manual, Carrying Case

Ordering Information

OFS-900	Fixed V-Groove Splicer

SPLICERS

OFS-920

All-in-One, Fixed V-Groove FTTX Fusion Splicer

The Precision Rated Optics OFS-920 "All-in-One" FTTC Fixed V-Groove Fusion Splicer has been uniquely engineered to accomplish all major fusion splicing tasks: heating, stripping, cleaning, cleaving, splicing and sleeving. Everything you'll need is right onboard.

The OFS-920 touchscreen and intuitive interface make it easy to navigate the various functions quickly and efficiently. The OFS-920 is also compatible with Splice-On-Connectors (optional), allowing you to work faster and more efficiently.

Built tough, the OFS-920 is water, dust and shock resistant and able to endure working conditions that would easily disable lesser units. Sold, serviced and supported in the USA, the OFS-920 comes standard with a 1-year manufacturer's warranty and carrying case.

- "All-in-One" Design (Fixed V-Groove)
- Built-in Thermal Stripper & Sleeve Loader
- Compatible with SOC Connectors (optional)
- Touchscreen with 4.3" Color Monitor
- Water, Dust and Shock Resistant

SPECIFICATIONS

Alignment	Fixed V-Groove (Clad to Clad)
Cladding Diameter	125μm
Coating Diameter	250μm ~ 900μm
Average Splice Loss	SM: 0.03dB, MM: 0.02dB, NZDS,DS: 0.06dB
Splicing Time	7 sec
Heating Times	20 sec (0.9mm Fiber), 70 sec (Indoor, 3.0mm Cable)
Sleeve Lengths	30mm (0.9mm Fiber), 40mm (2.0, 3.0mm, Indoor Cable)
Tension Test	1.96N
Splice Memory	2000 Splicing Operations
Dimensions (LxWxD)	7.8" x 5.3" x 3.2" (200 x 135 x 82mm)
Weight	1.5 kg (Body 1.1kg, Battery 120g x 2)
Power Supply	DC Li-Polymer Battery, 100~240V AC Adaptor
Additional Power (Optional)	DC 12V (Vehicle Accessory Jack)
Battery Capacity	1400 mAh (x2)
Splicing/Heating Operations w/Batt.	> 120 Operations (0.9mm Fiber)
Alignment	0.25mm, 0.9mm, 2.0mm, 3.0mm, Indoor Cable
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Weight & Dimensions (LxWxH)	7.8" x 5.3" x 3.2" / 3.3 lb (200 x 135 x 82mm / 1.5 kg)

OFS-920 Standard Package Includes:

Splicer, AC Adaptor, Battery Charger, DC Li-Polymer Battery, 900μm Fiber Holders, Spare Electrode, Manual, Carrying Case

Ordering Information

OFS-920	Splicer, Thermal Stripper, Cleaver & Alcohol Dispenser

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

OFS-930

Core Alignment Fusion Splicer

The OFS-930 Core-Alignment Fusion Splicer has quickly become an industry favorite. Featuring an incredibly intuitive interface, IPAS Core-to-Core Alignment technology and the ability to accomodate a wide variety of fiber, the OFS-930 is a true workhorse.

Built to last, the OFS-930 is water, dust and shock resistant. Built-in dual sleeve heaters increase efficiency and the thermal stripper can cleanly strip your fiber in just 1.5 seconds!

The OFS-930 has a battery capacity that can easily achieve over 250x splicing/heating operations, allowing you to work all day long. Sold, serviced and supported in the USA, the OFS-930 comes with a 1-year warranty, a carrying case and is RoHS compliant.

- IPAS Core-to-Core Alignment
- Water, Dust and Shock Resistant
- Dual Sleeve Heaters
- 4.3" Color LCD Touchscreen Monitor
- ROHS Compliant

RoHS ✔ COMPLIANT

PRECISION RATED OPTICS

SPECIFICATIONS

Alignment	IPAS Core-to-Core Alignment (Image Pattern Analysis Alignment System)
Applicable Fibers	SMF (ITU-T G.652), MMF (ITU-T G.651), DSF (ITU-T G.653), NZDSF (ITU-T G.655), EDFA, EI980
Fiber Diameters	Cladding : 80μm ~ 150μm , Coating : 100μm~ 1,000μm (single)
Fiber Cleave Lengths	250μm (Coating): 8 ~ 16mm, 900μm: 16mm
Typical Splice Loss	SMF: 0.02dB, MMF: 0.01dB, DSF: 0.04dB, NZDSF: 0.04dB
Return Loss	< -60dB
Splicing Times	Splicing: Typically 9 sec, Tube Heating: Typically 26 sec with S-160 (60mm) Tube
Programs	Spice Mode: 100, Heat Mode: 50
Storage of Splice Results	2,000 Splice Results (100x Images)
Ports	USB, RCA, External Power
Power Supply	DC 14.8V Battery (5600mAh), 100 ~ 240V AC Adaptor
Additional Power (Optional)	DC 12V (Vehicle Accessory Port)
Splicing / Heating Operations w/Batt.	250 Splicing/Heating Operations, Lithium-Polymer Batteries
Electrode Lifespan	> 2,000 Splicing Operations
Imaging	Two (2x) CMOS Cameras and 4.3" Color LCD Touchscreen Monitor
Fiber View and Magnification	X/Y 300X, 170X
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)
Storage Temperature	-40° F ~ 176° F (-40° C ~ 80° C)
Environmental Conditions	0 ~ 95% RH (Humidity), 0 ~ 5000m (Altitude), Wind 15 m/s, Water, Dust and Shock Resistant
Weight & Dimensions (LxWxH)	5.4" x 6.2" x 5.3" / 5.5 lb (138 x 160 x 135mm / 2.3 kg) (Including Monitor & Rubber Boot)

OFS-930 Standard Package Includes:

Fusion Splicer, AC Adaptor, Sleeve Loader, Battery Pack, Precision Cleaver, Alcohol Dispenser, Spare Electrodes, Cooling Tray, Fiber Stripper, Manual, Carrying Case

Ordering Information

OFS-930	Core Alignment Fusion Splicer (PAS)

TP-P6
Multifunctional Test Platform

**Large 8.4"
Touchscreen Display**

PRECISION RATED OPTICS

The TP-P6 is a compact, modular platform that allows for the "stacking" of up to three modules, providing a multitude of customizable configurations. Specifically designed for LAN, WAN FTTx and PON applications, the use of "Plug-and-Play" modules allows the TP-P6 to meet all of the test requirements for installers, contractors and service operators, performing network installation, service activation, maintenance or troubleshooting.

Some of the available features include an OTDR, Stabilized Light Source, PON Meter, Power Meter and Video Inspection Probe (VIP). An 8.4" TFT touchscreen display, with an intuitive onscreen interface makes operation quick and efficient.

Sold, Serviced and supported in the USA, the TP-P6 comes standard with a 1-Year manufacturer's warranty, as well as Li-Ion Battery, AC/DC adaptor and carrying case.

Platform Features (Mainframe)

● 8.4" TFT Touchscreen (800x600)

● Li-Ion Battery w/AC Adaptor

● Optimized Power Management: 7 Hours of Continuous Operation

● Fast Boot-Up and Windows CE Operating System

Available Test and Inspection Modules

● VIP

● OTDR (with VFL)

● PON Power Meter   (1310/1490/1550nm)

● Optical Power Meter

● Stabilized Light Source

Design Your Modules
A "Plug-and-Play" module can accommodate up to four individual test instruments. At the time of ordering, simply tell us which instruments you need and they will be built into the module.

Add Modules Later
If you desire, you can always add modules at a later time for greater functionality. The platform will accommodate up to three modules, stacked back-to-back.

To add additional test instrument functionality, you can either send us your original module for customization, or you can simply order another module and plug it into the back of the platform. Simple!

Add-on modules make adding functionality incredibly simple.

Power | VIP | Ethernet | USB "A" | USB "B"

Platform Mainframe Standard Ports

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

Platform Specifications (Mainframe) (TP-P6)

Memory	2 GB
Ports	USB (x2); 10/100Mbit/s RJ-45x1
Power Supply	Li-Ion Battery/AC Adaptor
Battery Life	7 Hours of Continuous Operation
Display	8.4" TFT Touchscreen (800 x 600px)
Weight & Dimensions (HxWxD)	12.6" x 7.5" 2.8" / 4.6 lb (320 x 190 x 70mm / 2.1 kg) (Platform Only)

Sample Product Number

TP-P6 - MFQ41 - PM - MVIP

Platform Mainframe

Quad OTDR Module w/ Built in VFL

Power Meter -70 ~ +10 -50 ~ +27(CATV)

Video Inspection Probe

Available Modules

*OTDR with VFL (P/N: MFXXX)

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

All OTDR modules are available with built-in Power Meter

OTDR Wavelength Options

P/N	Wavelength (±20nm)	Dynamic Range (dB)	EDZ (m)	ADZ (m)
MFS21	1310/1550	45/43	1	7
MFS31	1310/1490/1550	38/38/37	1.5	12
MFS32	1310/1550/1625	42/41/40	1.4	9
MFS33	1310/1550/1650	42/40/39	1	5/5/7
MFQ41	850/1300/1310/1550	23/36/38/36	1.5	8/10/10
MFS41	1310/1490/1550/1625	39/38/38/39	1.5	12

OPTIONAL Built-in OPM for OTDR Module (P/N: MP1)

CAL Wavelengths	850, 1300, 1310, 1490, 1550, 1625, 1650nm
Power Range (dBm)	-70 ~ +10 (-60 ~ +10 @ 850nm)

Module Example

Module port configurations determined by chosen options

TP-P6 Standard Package Includes:

TP-P6 Platform, Li-Ion Battery, AC/DC Adaptor/Charger, Rubber Boot and Soft Carrying Case

Optical Power Meter (P/N: MFXXX-PM)

CAL Wavelength	850, 1300, 1310, 1490, 1550, 1625, 1650nm	
Power Range (dBm)	-70 ~ +10 (-60 ~ +10 @ 850nm)	-50 ~ +27 (CATV)
Accuracy	± 5% ±0.01nW (±0.5dB@850nm)	± 5% ±1nW (±0.5dB@850nm)
Detector Type	InGaAs	
MOD Identification	270, 1K, 2K Hz	
Resolution	0.01dB	
Connectors	FC (Interchangeable SC, ST)	

Stabilized Light Source (P/N: MFXXX-S)

Wavelengths	1310, 1490, 1550, 1625nm (±20nm)
Emitter Types	FP-LD@1310, 1490, 1550nm; DFB-LD@1625nm
Output Mode	CW, 270Hz, 1KHZ, 2KHz
Spectrum Width	≤ 5nm
Output Power	≥ -3dBm
Power Stability	± 0.05dB/15min; ± 0.10dB/8hr
Connectors	FC/PC (Interchangeable SC, ST)

*PON Power Meter (P/N: MFXXX-P)

CAL Wavelengths	1310	1490	1550
Measurement Range	-40 ~ +10dBm	-40 ~ +10dBm	-40 ~ +10dBm
Spectral Passband	1310±50nm	1490±15nm	1550±10nm
Power Accuracy	≤ 0.5dB		
Display Resolution	0.01 dB		
Insertion Loss	≤ 1.5 dB		

Pass-through PON Power Meter simultaneous measures triple-play signals (1310/1490/1550)

Video Inspection Probe (P/N: MFXXX-MVIP)

Field of View	400μm x 300μm
Resolution	≤ 1.5μm
Focusing	Manual Focus
Hand-Probe Dimensions	32mm x 175mm

OTDRs

5350 *OTDR*

3-Year Warranty!

PRECISION RATED OPTICS

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

- 7" TFT, Color Touchscreen Display
- Bluetooth Enabled
- Built-in VFL
- Built-in Power Meter
- User-Friendly Interface

Available Options
- SC, ST & LC Adaptors
- Bare-Fiber Holder
- Video Inspection Probe
- Bluetooth

5000 Series Standard Package Includes:
OTDR, 12V Power Adaptor, Lithium Battery, FC Adaptor, USB Cord, User Guide, Test Report Software CD, Carrying Case

SPECIFICATIONS

Pulse Width	3-20Kns
Operational Wavelength	1310/1550 (Standard) Also Available in 1625 (With Optional Filter)
Dynamic Range	32/30dB (Standard) Also Available in: 35/33dB, 40/38dB, 43/41dB
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	$\pm$ (1m+Measuring Distance x 3 x 10^{-5} + 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: 6 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)

Ordering Information

PRO-5350	PRO-5350 SM OTDR (1310/1550nm) w/VFL & PM
PRO-5350-TS-40F	PRO-5350 40/38/38dB w/ Filter on 1625 w/ VFL& PM
PRO-5350-TS-D35	PRO-5350 OTDR SM, 35/33dB w/ VFL & PM
PRO-5350-TS-D40	PRO-5350 OTDR, SM 40/38dB w/ VFL & PM
PRO-5350-TS-D43	PRO-5350 OTDR, SM 43/41dB w/ VFL & PM
PRO-5350-TS-T40	PRO-5350 OTDR, SM 43/41dB w/ VFL & PM

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

2 Series *OTDR*

The OFT-2SM-35 (2 Series) OTDR is the most affordable Bluetooth-enabled OTDR on the market today. Featuring Trace Overlay, TFT Color Display, One-Button Auto-Test and Event Analysis, the OFT-2SM-35 is a powerful OTDR that can even be controlled via Bluetooth, through any Android phone or tablet! Remote control allows for more mobility, a more powerful file management system, Geo-tagging of files, instant file sharing as well as a display size limited only by the size of the Android device.

The OFT-2SM-35 has a wide dynamic range and a 2-Meter Dead Zone, making it ideal for links up to 180km as well as short LAN links or FTTA/FTTH applications. A built-in VIP port is standard, and an inspection probe is available.

Manufactured, sold, serviced and supported in the USA, the OFT-2SM-35 OTDR comes standard with a 1-year manufacturer's warranty, FC, ST and SC adaptors and a carrying case.

PRECISION RATED OPTICS

Bluetooth Enabled

Can be Controlled with Your Android Smart Phone or Tablet!!

- Event Table with Pass/Fail Feature
- One-Button Testing
- Controllable via Android Device (Bluetooth)
- Telcordia-Compatible Software Included
- Trace Comparison with Trace Overlay

2 Series OTDR Standard Package Includes:

Universal Power Adaptor w/US, UK, CE, and AU Plugs, Interchangeable FC, ST and SC Adaptors, Windows/Telcordia SR4731 Software, Rubber Boot, USB Cable, User Manual on CD

Ordering Information

OFT-2SM-35	1310/1550nm SM OTDR

OTDR Specifications

Wavelengths	1310,1550 (±20nm)
Dynamic Range	32/30dB (SM)
Pulse Width	20-10,000ns
Units of Measurement	km, kf, mi
Event Dead Zone	<2m
Attenuation Dead Zone	<5m
Resolution	.25 - 64m
Measurement Accuracy	± (0.75m + 0.005% x Distance +Sampling Resolution)
Full-Distance Accuracy Range	1-180km (SM)
Typical Real-Time Refresh Rate	4 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	1,000 Traces
Memory Type	Internal
Power Supply / Charger	Universal
Battery (Rechargeable)	4 hr.
Ports	USB, VIP
Connector Types	FC, ST, SC (Interchangeable)
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Storage Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Weight & Dimensions (HxWxH) (without rubber boot)	7.62" x 3.88" x 1.56" / 1.6 lb 194 x 99 x 40 mm / .072 kg

OFT-3V2 *OTDR*

Touchscreen, Keyboard or Tablet Control

The OFT-3V2 OTDR can be controlled via Bluetooth from any Android device. Also included are a built-in Auto-Test /Auto-Wave Power Meter, VFL and CW/Fiber Identifier Light Source. An integrated Video Scope port is standard (scope optional).

The OFT-3V2 has a 36dB dynamic range and a 1-Meter Dead Zone. Ruggedized construction, file storage for 1,000 traces, Fib-R-Map schematics, event analysis, multiple operational modes and a 4" touchscreen make it perfect for testing and troubleshooting in LAN, MAN or WAN applications. Units available in MM/SM/QUAD.

The OFT-3V2 is sold, serviced and supported in the USA and is water, dust and shock resistant. It comes standard with a 1-year manufacturer's warranty as well as FC, ST and SC adaptors.

- Bluetooth-Enabled - Controllable via Android Device
- "Instant-on" for Immediate Operation
- CW & Fiber Identifier Light Source
- Bi-Directional Trace Analysis
- Onboard Memory for 1,000 Traces

SPECIFICATIONS

Wavelength	850, 1300, 1310, 1490,1550 and 1625 (±20nm)
Dynamic Range	27/26dB MM, 36/35/35/35dB SM
Pulse Width	5 - 20,000 ns
Event Dead Zone	1m
Attenuation Dead Zone	4m
Data Points	up to 120,000
Resolution	.125 ~ 32m
Distance Measurement	± (0.75m + 0.005% x Distance + Sampling Resolution)
Distance Range	0.25-64 (MM), 0.25-240km (SM), 0.25 ~ 240km (Quad)
Real-time Refresh Rate	2 Hz
Connector Styles	FC, ST, SC
Communications Ports	USB and Bluetooth
Weight & Dimensions (HxWxH) (w/out boot)	7.75" x 4.5" x 2.25" / 1.7 lb (197 x 114 x 57mm / 0.8 kg)

Ordering Information

OFT-3V2-MM	850/1300nm Multimode Dual Wavelength OTDR W/VFL and LTS
OFT-3V2-SM	1310/1550nm Singlemode Dual Wavelength OTDR W/VFL and LTS
OFT-3V2-Q	850/1300/1310/1550nm Quad Wavelength OTDR W/VFL and LTS
VIS300	Video Probe

POWER METER SPECIFICATIONS

Detector Type	InGaAs
Connector Type	FC, ST and SC
Dynamic Range	+5 ~ -77dB, CATV (+25 ~ -57dB)
Auto Test Range	0 to -40dB
Calibrated Wavelengths	850, 1300, 1310, 1490, 1550, 1625nm (±20)
Power Measurement	± 0.18 dB (Under Reference Conditions), ± 0.25 dB (0 to -65 dBm), ± 0.35 dB (0 to +5 dBm) and from -65 to -77 dBm
Units of Measurement	dBm, dB
Resolution	.01 dB

LIGHT SOURCE SPECIFICATIONS

Fiber Type	Singlemode, Multimode
Wavelengths	850,1300,1310,1490,1550 and 625 nm (±20nm)
Output Power	0 dBm (-3dBm @ 1625nm)
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	270 Hz, 1,000 Hz, 2000 Hz (CW)

OFT-3V2 Standard Package Includes:

OTDR, Universal Power Adaptor w/US, UK, Continental Europe and Australian Adaptors, Interchangeable FC , ST and SC Adaptors, Android Application, Windows-Compatible Software, Rubber Boot and Manual on CD

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

5 Series *OTDR*

Boasting a 36dB dynamic range and a 1-meter Dead Zone, the OFT-5 Series OTDR satisfies even the most demanding testing and troubleshooting requirements. Featuring a one-button fault finder, ruggedized construction and multiple operational modes, the OFT-5 Series is perfect for LAN and Metro networks.

This versatile OTDR has a built-in Power Meter, Light Source, VFL and VIP port, 1-meter Dead Zone and onboard storage for 500 traces, downloadable via a USB port. Interchangeable FC, ST and SC connectors are included for maximize versatility.

Manufactured, sold, serviced and supported in the USA, the OFT-5 Series comes with a 1-year manufacturer's warranty and "Cert-Soft" software.

- Manufactured in the USA
- Fiber Inspection Video Probe Port
- Onboard Memory Stores 500 Traces
- 36 dB Dynamic Range
- Short, 1-Meter Dead Zone

5 Series OTDR Standard Package Includes:

OTDR, Universal Power Adaptor with US, UK, Continental Europe and Australian Plugs, Interchangeable FC, ST and SC Adaptors, Windows/Telcordia SR4731 Software, Protective Rubber Boot, User Manual on CD and Soft Carrying Case

PRECISION RATED OPTICS

OTDR Specifications

Dynamic Range	27/26dB (MM), 36/34dB (SM)
Pulse Width	5 ~ 20,000 ns
Units of Measurement	km, kf, mi
Event Dead Zone	1m
Attenuation Dead Zone	4m
Resolution	.125 ~ 32m
Measurement Accuracy	± (0.75m + 0.005% x Distance + Sampling Resolution)
Distance Accuracy	1~64km MM, 1~180km 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
Memory Storage	Internal and Flash Drive
Power Supply	Universal AC/DC Adaptor / Charger
Battery (Rechargeable)	8hr
Communication Ports	USB and USB Flash Drive Ports
Connector Styles	FC, ST, SC Interchangeable
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Storage Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Weight & Dimensions (LxWxH)	7.75" x 4.5" x 2.25" / 2 lb (197 x 114 x 57 mm / 0.91 kg)

Light Source Specifications

Fiber Type	MM, SM
Wavelengths	850/1300 (MM), 1310/1550 nm (SM)
Output Power	0 dBm (-3dBm @ 1550nm)
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	270 Hz, 1,000 Hz, 2000 Hz (CW)

Power Meter Specifications

Detector Type	InGaAs
Connector Types	2.5mm (Interchangeable)
Dynamic Range	+5 ~ -77dB (CATV: +25 to -57dB)
Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Accuracy	± 0.18 dB (Under Reference Conditions), ± 0.25 dB from 0 ~ -65dBm, ± 0.35 dB from 0 ~ +5dBm and from -65 ~ -77dBm
Auto-Test Range	0 ~ -40dB

Visual Fault Locator Specifications

Emitter Type	Laser Photo Diode 1100~1700nm InGaAs -70 ~ +9dBm (with Interchangeable FC Adaptor)
Wavelength	650nm (±5nm)
Connector Type	2.5mm Universal
Output Power	1mW Max

Ordering Information

OFT-5SM-35-FP	1310/1550nm SM OTDR with LTS, VFL & VIP Port
OFT-5MM-83-FP	850/1300nm MM OTDR with LTS , VFL & VIP PORT
OFT-5Q-FP	850/1300/1310/1550nm QUAD OTDR with LTS , VFL & VIP Port
OFT-5SM-35-VFP	1310/1550nm SM OTDR with LTS, VFL, VIP Port, Probe and Soft Case
OFT-5MM-83-VFP	850/1300nm MM OTDR with LTS, VFL, VIP Port, Probe and Soft Case
OFT-5Q-VFP	850/1300/1310/1550nm QUAD OTDR with LTS, VFL, VIP Port, Probe& Case

VP Models Include

Fault Locator, Power Meter

VFP Models Include

Video Inspection Probe, Fault Locator, Power Meter

FBE-300 *OTDR*

PRECISION RATED OPTICS

Bluetooth Enabled

FiberBase Ready

The PRO FBE-300 is an American-made, Bluetooth-enabled, FiberBase-enabled OTDR that's controllable from any smartphone or tablet running the Android® operating system.

Available in Singlemode, Multimode or Quad versions, the FBE-300 also features one-button Auto-Test, a 2-meter Dead Zone and easy file transfer via USB. When coupled with FiberBase asset management software, the FBE-300 becomes one of the most powerful, flexible OTDRs on the market today.

Manufactured, sold, serviced and supported in the USA, the FBE-300 comes standard with FC/ST and SC adaptors, a universal charger/power adaptor and a 1-year manufacturer's warranty.

- Manufactured in the USA
- SM, MM and Quad Versions Available
- 32 dB Dynamic Range (SM)
- Controllable via Android® Tablet
- 2-Meter Dead Zone

SPECIFICATIONS

Dynamic Range	Singlemode: 32/30dB Wavelength: 1310, 1550, (±20nm)
	Multimode: 27/26dB Wavelengths: 850, 1300
Pulse Width	20 ~ 10,000 ns
Units of Measurement	km, kf
Event Dead Zone	2m
Attenuation Dead Zone	5m
Resolution	.25 ~ 64m
Distance Variable	±(0.75m + 0.005% x Distance + Sampling Resolution)
Accuracy Range	1-64km (MM) , 1-160km (SM)
Typical Real-Time Refresh Rate	>1Hz
Group Index of Refraction	1.024 - 2.048
Linearity	± .05 dB/dB
Memory Capacity	1,000 Traces
Communication Ports	Bluetooth, USB
Power Supply / Charger	Universal AC/DC
Battery Capacity	4 hr.
Connector Types	FC, ST, SC (Interchangeable)
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Storage Temperature	-4°F ~ 140°F (-20°C ~ 60°C)
Weight & Dimensions (HxWxD) (Without Rubber Boot)	7.62" x 3.88" x 1.56" / 1.4 lb (194 x 99 x 40mm / 0.6 kg)

FBE-300 OTDR Standard Package Includes:

OTDR, Universal Power Adaptor w/US, UK, CE and AU Plugs, Interchangeable FC, ST and SC Adaptors, Windows / Telcordia SR4731 Software, Rubber Boot, USB Cable, Manual on CD

Ordering Information

FBE-300-SM	32/30dB, 1310/1550nm SM with LTS & VIP PORT
FBE-300-MM	27/26dB, 850-1300nm MM with LTS & VIP PORT
FBE-300-QUAD	27/26/32/30dB 850/1300/1310/1550nm Quad with LTS & VIP PORT

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

"Super-Tech" Optical Unit

Manufactured, Serviced and Supported in the USA!

*The OTDR that has an 8-Channel CWDM Channel Analyzer,
Optical Loss Tester, Visual Fault Locator, Inspection Scope and much more!*

The "Super-Tech" All-in-One Optical Unit combines six essential tools. It includes an 8-Channel CWDM Channel Analyzer, 1310/1550nm Light Source, VIP port, VFL, Power Meter and Singlemode 1310/1550 OTDR for the ultimate in flexibility.

The 4" TFT display makes navigating the interface quick and easy. The Channel Analyzer features a 1/4-second refresh rate while scanning the top eight CWDM channels on the ITU grid (1471-1611nm). The Singlemode OTDR works at the 1310 and 1550nm wavelengths and can store 500 trace results, which can then be transferred via USB and managed with the included Telcordia SR4731 software.

The "Super-Tech" Optical Unit is manufactured, sold, serviced and supported in the USA. It comes standard with a 1-year manufacturer's warranty, FC, ST and SC adaptors, an AC/DC adaptor and soft carrying case.

- Rugged Case with Impact-Resistant Boot for Durability
- Onboard Help Database for Easy Operation
- 4" TFT Color Display for Quick Data Interpretation
- Long Battery Life for Lengthy Service Calls
- USB/PC and USB Flash Ports for Easy Data Transfer

PRECISION RATED OPTICS

OTDR

Wavelength	1310, 1550 nm
Dynamic Range	36 / 34 dB (SM)
Pulse Width	5 ~ 20,000 ns
Units of Measurement	km, kf, mi
Event Dead Zone	1m
Attenuation Dead Zone	4m
Resolution	.125 ~ 32m
Distance Measurements	± (0.75m + 0.005% x distance + sampling resolution)
Full-Distance Accuracy Range	1-180km Singlemode
Typical Real-Time Refresh Rate	2 Hz
Group Index of Refraction (GIR)	1.024 - 2.048
Linearity	± .05 dB/dB
Connector Styles	FC, ST, SC Interchangeable
Memory Capacity	500 Traces

Power Meter Specifications

Detector Type	InGaAs
Connector Types	FC, ST and SC
Dynamic Range	+5 ~ -77dB (CATV +25 ~ -57dB)
Calibrated Wavelengths	850,1300,1310,1490,1550,1625nm
Units of Measurement	dBm, dB
Resolution	.01 dB
Power Measurement Uncertainty	± 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
Auto Test Range	0 ~ -40dB

Light Source Specifications

Fiber Type	SM/MM
Wavelengths	850, 1300, 1310, 1550 nm (±20nm)
Output Power	0 dBm (-3dBm @ 1550nm)
Laser Safety Classification	Class I Safety Per FDA/CDRH and IEC-825-1 Regulation
Modulation Modes	CW, 270 Hz, 1,000 Hz, 2000 Hz

CWDM Channel Analyzer

Wavelength Range	8-Channel 1471 ~ 1611nm
Channel Spacing	20nm
Channel Pass Band	±6.5nm
Channel Power Range	+5dBm ~ -50dBm
Absolute Accuracy	±1 dB
Max Composite Power	+23dBm
PDL	±0.2dB
Adjacent Channel Isolation	30dB
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
Memory Capacity	1,000 Scans

Visible Light Source

Emitter Type	Laser Photo Diode 1100 ~ 1700nm InGaAs-70 ~ +9dBm with Interchangeable FC Adaptor
Wavelength	650nm (±5nm)
Connector Type	2.5mm Universal
Output Power	1mW Max.

Super-Tech OTDR Standard Package Includes:

OTDR, Universal Power Adaptor w/US, UK, CE and AU Plugs, FC, ST and SC Adaptors, Windows/Telcordia SR4731 Software, Rubber Boot, USB Cable, Manual on CD

Ordering Information

OFT-8CW-35SM-FP	8 Channel CWDM w/ SM OTDR, VFL, LTS & VIP Port
OFT-8CW-35SM-VFP	8 Channel CWDM w/ SM OTDR, VFL, LTS, VIP Port, Probe & Soft Case

OTDRs

OBL-201A *Break Locator*

PRECISION RATED OPTICS

3-Year Warranty!

The OBL-201A Break Locator is a 9/125μm Singlemode Break Locator operating at 1550nm (± 20nm) and boasting a 100mW output, capable of testing up to 100Km. Technicians can quickly locate fiber breaks and imperfections and detailed results are displayed on a large LCD screen.

At only 10 oz, this unit is extremely portable and user-friendly. The USB port and included USB cable make it easy to transfer data and perform updates. A built-in VFL port and <3 Meter Dead-Zone make the OBL-201A a true performer.

Sold, serviced and supported in the USA, the OBL-201A comes with a standard 3-year manufacturer's warranty, interchangeable connectors and a rechargeable NiMH battery and charger.

● Short Dead Zone - Less Than 3m
● Backlit for Easy Operation in Low Light
● Data Transfer via USB Interface
● Interchangeable Connectors (SC/ST/FC)
● Built-in VFL Port

SPECIFICATIONS

Fiber Type	9/125µm Singlemode
Wavelength	1550 (± 20nm)
Emitter Type	LD
Connector Type	FC/PC (Interchangeable SC,ST)
Pulse Width	10ns/20ns/40ns/80ns/160/ns/320ns/640ns/1280ns/2560ns/5120ns/12400ns/24800ns (Auto-Switch)
Max. Output Power	100 mW
Max. Measurement Range	100 Km
Distance Accuracy	+/- (0.8 m + 0.001% x Distance)
Data Storage	999 Measurements
Event Dead Zone	<3 m
Power Supply	AC/DC Adaptor
Battery Life	Rechargeable NiMH Battery (15,000 Tests)
Communication Port	Mini USB
Warranty	Standard 3-Year Manufacturer Warranty (Extended Warranty Available)
Operating Temperature	14°F~122°F (-10°C ~ +50°C)
Storage Temperature	-4°F ~ 140°F (20°C~ +60°C)
Environmental Conditions	0 ~ 85% (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	7.5" x 4.1" x 2.1" / 10 oz (190 x 105 x 55mm / 286 g)

OBL-201A Standard Package Includes:

Rechargeable NiMH Batteries (x4), AC/DC Adaptor/Charger, PC Data Management Software, USB Cable, Test Report, Manual, Soft Carrying Case

Ordering Information

OBL-201A	Optical Break Locator

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

OFL-301A *Fault Locator*

The OFL-301A is a high-performance, easy-to-use diagnostic tool designed for fiber maintenance, locating faults and general troubleshooting. The OFL-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 dustproof, the OFL-301A is reliable and built to last. The unit will operate for up to 10 hours on the included NiMH rechargable battery and includes an AC/DC adaptor. Sold, serviced and supported in the USA, the OFL-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

SPECIFICATIONS

Fiber Type / Wavelength	Singlemode, 1550nm (±**20nm**)
Dynamic Range	26dB
Range of Use	Singlemode Fiber
Emitter Type	LD
Connector	FC/PC (Interchangeable SC, ST)
Distance Accuracy	± (1m + 5 x 10^{-5} x Distance + Sampling Space)
Data Storage	1,000 Results
Communication Ports	RS-232/USB
Power Supply	NiMH Rechargeable Battery / AC Adapter
Battery Life	>10 Hours / 20 Hours Standby
Warranty	1-Year Manufacturer's Warranty
Operating Temperature	30°F ~ 122°F (0°C ~ 50°C)
Storage Temperature	-4°F ~ 158°F(-20°C ~ 70°C)
Environmental Conditions	0 ~ 95% RH (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	7.7" x 3.9" x 2.4" / 1.9 lb (196 x 100 x 60mm / 861 g)

OFL-301A Standard Package Includes:

OFL, Rechargeable Battery, AC/DC Adaptor, Trace Manager Software CD, Data Transfer Cable (RS232/USB), Rubber Boot, Warranty Card, CE Certificate, Certificate of Calibration, Quick-Reference Guide, Soft Carrying Case

Ordering Information

OFL-301A	Optical Fault Locator

OTDRs

CWDM-LR / CWDM-HR
CWDM OTDR from 1471 through 1611nm!

PRECISION RATED OPTICS

Manufactured, Serviced and Supported in the USA!

Manufactured in the USA, the CWDM-LR and CWDM-HR 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 (LR) and 1551, 1571, 1591, 1611nm (HR). Other wavelength combinations are available upon request.

The PRO-CWDM 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 PRO-CWDM 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, Multimode
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 IIFDA21 CFR1040.10 & 1040.11 IEC 825-1: 1993
Connector Type	2.5mm Universal
Output Power	1mW Max.

SPECIFICATIONS

Item / Model No.	CWDM-LR	CWDM-HR
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)	

CWDM LR/HR Standard Package Includes:

Universal AC/DC Power Adaptor/Charger w/US, UK, Continental Europe, and Australian Plugs, Interchangeable FC, ST and SC Adaptors, Windows/Telcordia SR4731 Software, Soft Carrying Case

Ordering Information

OFT-CWDM-LR	1471, 1491, 1511, 1531nm CWDM Wavelengths
OFT-CWDM-HR	1551, 1571, 1591, 1611nm CWDM Wavelengths

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

HCC-CW-201A
CWDM/10CH Analyzer

3-Year Warranty!

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

The HCC-CW-201A 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 HCC-CW-201A 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)

HCC-CW-201A Standard Package Includes:

CWDM Analyzer, NiMH Battery, AC Adaptor, USB Cable, Software CD, Calibration Certification, User Manual, Carrying Case

Ordering Information

HCC-CW-201A	18 Channel CWDM Channel Analyzer

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)

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 ºC

General

Power Supply	NiMH Rechargeable Battery / AC Adaptor
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)

PRECISION RATED OPTICS

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HCC-CW18-510A
18-Channel Analyzer

Manufactured, Serviced and Supported in the USA!

The HCC-CW18-510A CWDM 18-Channel Analyzer displays a full scan of the 18 channels on the ITU grid twice per second. The onscreen interface is intuitive, and allows the user instant access to all functions.

With its "One-Button Auto-Test" feature, and a full set of selectable scale limits and thresholds, the PRO CWDM makes zeroing in on channel measurements incredibly easy.

Manufactured, sold, serviced and supported in the USA, the HCC-CW18-510A Channel Analyzer comes standard with FC and SC adaptors, Windows-compatible software and a 1-year manufacturer's warranty.

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

SPECIFICATIONS

Wavelength Range	1271~1611nm
Channel Spacing	20nm
Channel λ Accuracy	1.0nm
Channel Pass Band	±6.5nm
Channel Power Range	+5dBm ~ -50dBm
Max Composite Power	+23dBm
Polarization Dependent Loss	±0.2dB
Adjacent Channel Isolation	30dB
Return Loss	>40dB
Battery	Rechargeable NiMH (8 Hours Operating Time)
Weight & Dimensions (HxWxD)	7.75" x 4.5" x 2.25" / 2 lb (197 x 114 x 57 mm / 907 g)

We also offer the PRO-DWDM-LR or PRO-DWDM-HR Handheld Optical Spectrum Analyzer for DWDM network testing applications

CWDM 18-Channel Analyzer Standard Package Includes:

Channel Analyzer, Universal Power Supply with Mains for US, UK, CE and AU. Interchangeable FC and SC Adaptors, Windows-Compatible Software, USB Cable, Rubber Boot and User Manual

Ordering Information

OFT-18-CWDM	18-Channel CWDM Channel Analyzer w/ VIP Port

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

DWDM-LR / DWDM-HR
Channel Analyzer

Manufactured, Serviced and Supported in the USA!

The PRO DWDM 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 DWDM 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 PRO-DWDM Optical Channel Analyzer is housed in a ruggedized metal enclosure with a robust, protective boot.

PRECISION RATED OPTICS

- C-Band - Up to 88 Channels
- Maximum Composite Power 28 dBm
- Solid-State Optics
- 4" Color TFT Touchscreen
- VIP Port (Probe Optional)

DWDM Standard Package Includes:

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

SPECIFICATIONS

Item / Model No.	DWDM-LR	DWDM-HR
Wavelength Range	C-Band 1530 ~1561nm (196.0 THz - 192.0THz)	L-Band 1574 ~ 1608nm (190.5 THz - 186.3 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 (Extended Warranty Available)	

Ordering Information

OFT-DWDM-LR	C-Band 1530 - 1561nm (196.0 THz - 192.0THz) w/ VIP Port
OFT-DWDM-HR	L-Band 1574 - 1608nm (190.5THz - 186.3 THz) w/ VIP Port

FTP-1 *FTTx OTDR*

The PRO FTP-1 OTDR boasts massive OTDR testing power in a small, ruggedized package. Designed for FTTx applications, the FTP-1 is also available with an optional Light Source, Power Meter and VFL.

With up to 65,534 sampling points, "Pass/Fail" assessment and ORL test function, the FTP-1 can precisely locate fiber events, making it perfect for FTTx applications, installation, maintenance, R&D and network testing. The user can store up to 1,000 test results and transfer the results (via USB) to data management software, such as FiberBase.

Sold, serviced and supported in the USA, the FTP-1 comes with a standard 1-year manufacturer's warranty, FC/PC, SC and ST adaptors and a soft carrying case.

- Ideal for LAN/WAN/FTTx Certification & Troubleshooting
- Optional Stabilized Light Source, SM/MM Power Meter and VFL
- Pass/Fail Assessment and ORL Test Function
- Storage of 1,000 Test Results
- USB/RS-232 Data Interface, Driver-Free

SPECIFICATIONS

Selectable Range (km) (1)	0.1, 0.3, 0.5, 1.3, 2.5, 5.0, 10 @ 850nm; 0.1, 0.3, 0.5, 1.3, 2.5, 5.0, 10, 20, 40, 80 @ 1300nm; 0.3, 1.3, 2.5, 5.0, 10, 20, 40, 80, 120, 160, 240 @ others
Pulse Width (2)	12ns, 30ns, 100ns, 275ns, 1μs @ 850nm; 12ns, 30ns, 100ns, 275ns, 1μs, 2.5μs @ 1300nm; 5ns, 10ns, 12ns, 30ns, 100ns, 275ns, 300ns, 1μs, 2.5μs, 10μs, 20μs @ others
Averaging Time	15s, 30s, 1min, 2min, 3min
Distance Measure Accuracy	± (1m + 5x10-5 x Distance + Sampling Space)
Attenuation Detect Accuracy	± 0.05 dB / dB
Reflection Detect Accuracy	± 4dB
Data Storage	1,000 records
Connectivity	USB / RS-232
Connector	FC / PC (Interchangeable SC, ST)
Power Supply	NiMH Battery / AC Adaptor
Battery Life	8 hours continuous operation; 20 hours standby (on one charge)
Operating Temperature	32°F ~ 122°F (0°C ~ 50°C)
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)
Environmental Conditions	0~95% (Humidity, Non-Condensing)
Weight & Dimensions (HxWxD)	8.7" x 4.3" x 2.7" / 2.2 lb (220 x 110 x 70 mm / 1 kg)

SPECIFICATIONS

	FTP1-MA	FTP1-SA	FTP1-SB	FTP1-SC	FTP1-SD
Wavelength (± 20nm)	850/1300	1310/1550			
Dynamic Range	21/24dB	28/26dB	32/32dB	38/37dB	45/43dB
Event Deadzone (m)		1.8		2.5	
Attenuation Deadzone (m)	8	10		14	
Multimode	Yes	No			

Ordering Information

FTP1-MA	MM (850/1300) OTDR:21/24dB
FTP1-SA	SM (1310/1550) OTDR: 28/26db
FTP1-SB	SM (1310/1550) OTDR: 32/32dB

FTP1-SC	SM (1310/1550) OTDR: 38-37dB
FTP1-SD	SM (1310/1550) OTDR: 45/43dB

Pulse Suppressor

AKA "Launch Boxes"

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 Pelican Case
- Corning Fiber Optic Cable
- Reduce Wear and Tear on OTDR Connectors
- Improves EMD in Multimode Fibers for More Precise Measurements

PRECISION RATED OPTICS

How to Configure Your Part Number:

PS - M -100 - FC - ST

(PS) -(Fiber Type) - (Meters) - (Connector Type) - (Connector Type)

Pulse Suppressor	Fiber Type	Fiber Length (Meters)	First Connector	Second Connector
PS	Single (S)	100 Meter	FC (UPC/APC)	FC (UPC/APC)
PS	Multi-Mode (MM)	300 Meter	SC (UPC/APC)	SC (UPC/APC)
PS		500 Meter	ST (UPC)	ST (UPC)
PS		1K Meter	LC (UPC/APC)	LC (UPC/APC)
PS		2K Meter		

PR○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:

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

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

PRECISION RATED OPTICS

PRECISION RATED OPTICS

100 Series *Light Sources*

3-Year Warranty!

The 100 Series Laser Sources offers excellent stability and portability for accurate fiber optic testing in conjunction with an optical power meter.

The 100 Series Laser Sources 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 recharge the battery and the unit's light weight, smaller size and ergonomic shape have been extremely well-received by technicians at every level.

The 100 Series Laser Sources come standard with a SC/PC connector, as well as a standard 3-Year warranty, rechargeable Li-ion battery, AC adaptor and soft carrying case.

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

LS-102D Light Source

SPECIFICATIONS

Item / Model No.	LS-102D	LS-103D
Output Wavelength (nm)	1310 & 1550	850 & 1300
Emitter Type	LD	
Connector*	SC/PC	
Output Stability	Short-Term (15 minutes): <0.1dB; Long-Term (5 Hours or more): <0.2dB	
Central Wavelength	1310 ± 20nm & 1550 ± 20nm	850 ± 10nm & 1300 ± 20nm
Spectral Width	5 nm	
Output Frequency (Hz)	270, 1K, 2K	
Output Power	- 5 dBm	
Power Supply	Li-ion Battery, 5V AC/DC Adaptor	
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 (Extended Warranty Available)	

100 Series Light Sources Standard Package Includes:

SC/PC Connector (built-in), User Manual, AC/DC Power Adaptor, Calibration Report, Li-ion Battery, Soft Carrying Case
*APC available upon request

Ordering Information

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

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

LS-202D
Light Source

3-Year Warranty!

The LS-202D series offers excellent stability and portability for accurate fiber optic testing. Dual output ports provide stable laser power at 1310 and 1550nm wavelengths and can operate in either continuous wave (CW) mode or Modulated Mode (Hz).

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 LS-202D delivers rock-solid reliability under all working conditions.

The LS-202D comes standard with a 2.5mm port and FC/PC, SC/PC, ST/PC connectors, a 3-Year manufacturer warranty and is sold, serviced and supported in the USA.

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

LS-202D Light Source

PRECISION RATED OPTICS

SPECIFICATIONS

Output Wavelength (nm)	1310 / 1550
Emitter Type	LD
Connector	FC/PC, SC/PC, ST/PC (Interchangeable) (APC is Available Upon Request)
Output Stability	Short-Term (15 min.): < ±0.05dB @ 1310,1550nm Long Term (>8 Hours): < ±0.1dB @ 1310,1550nm
Central Wavelengths	1310 (±20) & 1550 (±20)
Spectral Width	5 nm
Output Frequency (Hz)	270 / 1,000 / 2000
Output Power	-5 dBm
Power Supply	2500mAh Ni-MH AA (x2), AC/DC Power Supply
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)
Warranty	Standard 3-Year Manufacturer Warranty (Extended Warranty Available)

PM-202D Light Source Standard Package Includes:

FC/PC, SC/PC, ST/PC Interchangeable Connectors, User Manual, Worldwide-Compatible AC/DC Power Adaptor, Rechargeable Battery, Calibration Report, Soft Carrying Case

Ordering Information

LS-202D	LS-202D Light Source (1310/1550) SM

200 Series *Quad Light Sources*

3-Year Warranty!

PRECISION RATED OPTICS

The 200 Series Quad Light Sources offers excellent stability and portability for accurate fiber optic testing. Dual output ports provide stable laser power at four (x4) common wavelengths. 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 lightweight and smaller size delivers rock-solid reliability under all working conditions.

The 200 Series Quad Light Sources are sold, serviced and supported in the USA and comes with a standard 3-Year warranty (extended warranty available), a 2.5mm port with FC/PC, SC/PC, ST/PC connectors and a soft carrying case.

LS-201Q Light Source

- Easy-to-Use, Straight-Forward Operation
- LCD Backlight for Easy Operation in Dark Environments
- Rechargeable Batteries Included
- 3-Year Warranty and Recommended Calibration Interval
- Sold, Serviced and Supported in the USA

SPECIFICATIONS

Item / Model No.	LS-201Q	LS-202X
Output wavelength (nm)	850/1300/1310/1550 (MM/SM)	1310/1490/1550/1625 (SM)
Emitter Type	LD	
Connector	FC/PC, SC/PC, ST/PC Interchangeable Connectors (APC is available at the time of ordering)	
Output stability	Short-Term (15 min): ±0.1dB @ 850/1300nm / < ±0.05dB @ 1310/1550nm Long-Term (>8 Hours): ±0.2dB @ 850/1300nm / < ±0.1dB @ 1310/1550nm	
Central Wavelength	± 20nm	
Spectral Width	5nm	
Output Frequency (Hz)	270 / 1,000 / 2000	
Output Power	-5 dBm	
Power Supply	2500mAh Ni-MH AA (x2)	
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 1.7" / 9.5 oz (160 x 76 x 45 mm / 270 g)	

200 Quad Series Light Sources Standard Package Includes:

Light Source, FC/PC, SC/PC, ST/PC Interchangeable Connectors, User Manual, Worldwide-Compatible AC/DC Power Adaptor, Battery, Test Report, Carrying Case

Ordering Information

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

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

LS-202T

Tri Light Source

Offering excellent stability and portability for accurate fiber optic testing, the LS-202T provides stable laser power at 1310, 1550 and 1625nm wavelengths. This compact unit will operate in either continuous wave (CW) mode or modulated mode.

Output power is instantly adjustable from the keypad. A convenient "Low-Battery" indicator reminds the user to recharge the battery, while the lightweight and smaller size of the LS-202T delivers rock-solid reliability under all working conditions.

The LS-202T is sold, serviced and supported in the USA, comes standard with FC/PC, SC/PC and ST/PC adaptors, and is backed by PRO's legendary 3-Year manufacturer's warranty.

- Easy-to-use, Straight Forward Operation
- LCD Backlight for Easy Operation in Darker Environments
- Rechargeable Batteries Included
- 3-Year Warranty and Recommended Calibration Interval
- Sold, Serviced and Supported in the USA

3-Year Warranty!

LS-202T Light Source

PRECISION RATED OPTICS

SPECIFICATIONS

Output wavelength (nm)	1310/ 1550/ 1625
Emitter Type	LD
Connectors	FC/PC, SC/PC, ST/PC (APC is Available at the Time of Ordering)
Output Stability	Short-Term (15 min.): < ±0.05dB @ 1310,1550nm; ±0.1dB @ 1625nm Long-Term (8 Hours): < ±0.1dB @ 1310,1550nm; ±0.2dB @ 1625nm
Central Wavelength	1310 (±20) & 1490 (±20) & 1550 (±20)
Spectral Width	5 nm
Output Frequency (Hz)	270 / 1,000 / 2,000
Output Power	-5 dBm
Power Supply	2500mAh Ni-MH AA (x2), AC/DC Power
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)

LS-202T Light Sources Standard Package Includes:

Light Source, FC/PC, SC/PC, ST/PC Interchangeable Connector, User Manual, Worldwide-Compatible AC/DC Power Adaptor, Rechargeable Ni-MH Batteries (x2), Test Report, Soft Carrying Case

Ordering Information

LS-202T	Light Source (FTTx) (1310/1550/1625)

100 Series *Power Meters*

PRECISION RATED OPTICS

3-Year Warranty!

PM-102A Power Meter

The 100 Series Power Meters work in conjunction with a laser source, automatically detecting the light wavelength at 850, 1300, 1310, 1490, 1550 and 1625nm. Ruggedized, lightweight and reliable, the 100 Series packs a lot of power into a reasonably-priced, easy-to-use unit.

A convenient "Low Battery" indicator reminds the user to recharge the battery, while the compact size delivers outstanding usability, typically only found on higher-priced units.

Sold, serviced and supported in the USA, the 100 Series Power Meters comes standard with a 2.5mm port and FC/PC, SC/PC, ST/PC connectors, as well as a standard 3-Year warranty, rechargeable Li-ion battery, AC adaptor and soft carrying case.

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

SPECIFICATIONS

Item / Model No.	PM- 102A	PM- 102B
Wavelength (nm)	850/1300/1310/1490/1550/1625	
Connectors	FC/PC, SC/PC, ST/PC	
Detector Type	InGaAs	
Accuracy	+ 0.35 dB + 10nW	
Resolution	0.01dB	
Linearity	+ 5%	
Measuring Range (dBm)	-60 ~ +3	-40 ~ +23
Power Supply	Li-ion Battery, 5V AC/DC Adaptor	
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 (Extended Warranty Available)	

100 Series Power Meters Standard Package Includes:

Power Meter, User Manual, Worldwide Compatible AC/DC Power Adaptor, Test Report, Adaptors: FC/PC, SC/PC, ST/PC, Built-in 2.5mm Universal Adaptor, Li-ion Battery, Carrying Case

Ordering Information

PM-102A	PM-102A Power Meter (+3 ~ -60)
PM-102B	PM-102B Power Meter (+23 ~ -40)

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

PM-12A/B *Optical Power Meter*

Small enough to fit in your shirt pocket, the PM-12 is a super-compact, ergonomic power meter that has a display range from +10 ~ -70dBm (12A), +26 ~ -50dBm (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 automatically detects the wavelength being tested, and when used in conjunction with any Light Source, the PM-12 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

PRECISION RATED OPTICS

SPECIFICATIONS

Item / Model No.	PM-12A	PM-12B
Display Range	+10 ~ -70dBm @ 1550nm	+26 ~ -50dBm @ 1550nm
Resolution	0.01 dB	
Calibrated Wavelengths	850 / 1300 / 1550 / 1490 / 1625	
Sensor Type	InGaAs	
Accuracy	0.35dB ±1nW	0.25dB ±10nW
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)	4.7" x 1.3" x 1.18" / 2.4 oz	

PM-12 A/B Standard Package Includes:

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

Ordering Information

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

200 Series *Power Meters*

PRECISION RATED OPTICS

3-Year Warranty!

PM-204A Power Meter

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.

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

SPECIFICATIONS

Item / Model No.	PM-204A	PM-204B
Calibrated Wavelength	850/1300/1310 /1490/1550/1625 (nm)	
Detector Type	InGaAs	
Accuracy	± 5% ± 1nW	± 5% ± 10nW
Resolution	0.01dB @ -60 ~ +10dBm; 0.1dB @ -70 ~ -60dBm	0.01dB @ -40 ~ +26dBm; 0.1dB @ -50 ~ -40dBm
Linearity	± 5%	
Measuring Range	-70 ~ +10 (dBm)	-50 ~ +26 (dBm)
Tone Detection (Hz)	270,1K,2K	
Power Supply	2500mAh NiMH AA Batteries (x2), 6V AC/DC Adaptor	
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)	
Warranty	Standard 3-Year Manufacturer Warranty (Extended Warranty Available)	

200 Series Power Meters Standard Package Includes:

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

Ordering Information

PM-204A	PM-204A Power Meter (+10 ~ -70)
PM-204B	PM-204B Power Meter (-50 ~ +26)

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

OLM-202A /202B
Optical Loss Multimeter

3-Year Warranty!

The OLM 200 Series Optical Loss Multimeters provide the ultimate in convenience by combining a versatile 850, 1300, 1310, 1490, 1550, 1625 (nm) Power Meter with a 1310, 1490, 1550nm Laser Source all in one unit. The OLM 200 Series is perfect for fiber installation and maintenance and is sold, serviced and supported in the USA.

Two technicians, equipped with two OLM 200 Series units can work twice as fast by testing two fibers at a time, without disconnecting the fiber or swapping connectors. Because the unit contains both a Power Meter and Light Source in one unit, it can also function as a backup if another Power Meter or Laser Source fails while on a job site.

Sold, serviced and supported in the USA, the OLM 200 Series is a tool any technician or installer should have in their toolbox. A 3-Year warranty is standard, along with data management software, 2.5mm port and FC, SC, ST connectors for PC/APC, rechargeable batteries, an AC/DC charger and a carrying case.

- Auto Wavelength Recognition
- Data Storage up to 999 Items
- USB Interface
- Data Management Software

OLM Series Standard Package Includes:

User Manual, Rechargeable Batteries, Interchangeable FC/SC/ST Connectors, Worldwide Compatible AC /DC Power Adaptor, PC Software, USB Connecting Cable, Carrying Case

SPECIFICATIONS

Item / Model No.		OLM-202A	OLM-202B
Power Meter	Calibration wavelength	850/1300/1310/1490/1550/1625 (nm)	
	Connector	Interchangeable FC, SC, ST for PC/APC	
	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)	
	Measuring Range (dBm)	-70 ~ +10	-50 ~ +26
Light Source	Output Wavelength (nm)	1310/1490/1550	
	Connector	Interchangeable FC/SC/ST for PC	
	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	
General Specification	Auto Power Off	Yes	
	Power Supply	2000mAh NiMH 1.2V, (x2), AC/DC Adaptor	
	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)	

Ordering Information

OLM-202A	OLM-202A Optical Loss Multimeter
OLM-202B	OLM-202B Optical Loss Multimeter

PON-301

PON Meter

PRECISION RATED OPTICS

3-Year Warranty!

The PON-301 (Passive Optical Network) is the flagship of PRO's optical power meters, intended to satisfy the increasing demands of the FTTx market. With the ability to detect breaks, dirty connectors and macro-bends, the PON-301 can simultaneously measure all three signals (1310nm, 1490nm and 1550nm) that carry voice, data and video ("triple-play") along a single fiber.

The simple operation and accuracy of the PON-301 makes it an ideal tool for PON (suitable for APON, BPON, EPON and GPON applications) often required for installation, service activation and troubleshooting. The PON-301 can measure not only 1490nm and 1550nm optical signals, but also accurately measure the upstream burst at 1310nm, sent from an ONU, while the ONU is in the idle mode.

Sold, serviced and supported in the USA, the PON-301 comes with a standard 1-year manufacturer's warranty, 2.5mm port and FC/PC, SC/PC, ST/PC interchangeable connectors, control software and a soft carrying case.

- Color-Specific Frequency Display
- Pass-through Connection for ONT Signal Measurement
- Simultaneous Measurement of all PON Signals (1310/1490/1550nm)
- Support APON, BPON, EPON and GPON networks
- Filtered Detectors for Individual Measurements of Each Wavelength

SPECIFICATIONS

Connector Type	FC/PC	SC/PC	ST/PC
Measurement Range	1310nm (Burst Mode)	1490nm	1550nm
	-32dBm ~ +5dBm	-30dBm ~ +15dBm	-40dBm ~ +20dBm
Spectral Passband	1310nm	1490nm	1550nm
	1260nm ~ 1360nm	1480nm ~ 1550nm	1539nm ~ 1565nm
Insertion Loss (dB)	1.5dB		
Accuracy (dB)	± 0.5dB		
Linearity (dB)	± 0.2dB		
Display	2.8" TFT LCD		
Refresh Rate of Display	2.5Hz		
Threshold	10 Sets (Configured via PC-based Software)		
Number of Ports	2 (1 for ONU,1 for OLT&.Video)		
Power Supply	1.2V ∗ 4pcs Ni-MH AA; 12V AC/DC Adapter		
Battery life	> 20 Hours		
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)		
Environmental Conditions	0 ~ 95% (Humidity, Non-Condensing)		
Weight & Dimensions (HxWxD)	7.5" x 4.1" x 2.2" / 1.5 lb (190 x 105 x 55 mm / 700 g)		

PON-301 Standard Package Includes:

FC/PC, SC/PC, ST/PC Interchangeable Connectors, User Manual, Control Software (CD), USB Cable, Batteries, AC/DC Adapter, and Test Report, Soft Carrying Case

Ordering Information

PON-301	PON Power Meter

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

PON-204B *PON Meter*

The PON-204B is intended for FTTH and FTTP systems, the PON-204B is the ideal tool for FTTH/FTTP service activation testing and field application troubleshooting.

Utilized throughout the maintenance phase, the PON-204B can detect various transmission problems such as fiber breaks, damaged or dirty connectors, macro-bends and optical transmitter failure, all of which can cause signal loss and/or degradation.

Sold, serviced and supported in the USA, the PON-204B comes standard with a 3-year manufacturer's warranty, data management software and a carrying case.

- Pass-Through Connection for ONT Signal Measurement
- Simultaneous Measurement of 10 PON Signals
- Filtered Detectors for Individual Measurements of Each Wavelength
- Upstream Burst Detection at 1310nm
- Compact, Ruggedized Design

SPECIFICATIONS

Connector Type	FC/PC	SC/PC	ST/PC
Measurement Range	1310nm(Burst Mode)	1490nm	1550nm
	-32dBm ~ +5dBm	-30dBm ~ +15dBm	-40dBm ~ +20dBm
Spectral Passband	1310nm	1490nm	1550nm
	1260nm ~ 1360nm	1480nm ~ 1550nm	1539nm ~ 1565nm
Insertion Loss (dB)	1.5dB		
Accuracy (dB)	± 0.5dB		
Linearity (dB)	± 0.2dB		
Display Type	2.8" TFT LCD		
Refresh Rate of Display	2.5Hz		
Threshold	10 Sets (Configured via PC-based Software)		
Number of Ports	2 (1 for ONU, 1 for OLT and Video)		
Power Supply	1.2V NiMH AA (x2), 12V AC/DC Adaptor		
Battery Life	>20 Hours		
Operating Temperature	14°F ~ 122°F (-10°C ~ +50°C)		
Environmental Conditions	0 ~ 90% (Humidity, Non-Condensing)		
Weight & Dimensions (HxWxD)	7.5" x 4.1" x 2.2" / 1.5 lb (190 x 105 x 55mm / 700 g)		

PON-204B Standard Package Includes:

PON Meter, FC/PC, SC/PC, ST/PC Interchangeable Connectors, Manual, Software CD, USB Cable, Rechargable Batteries, AC/DC Adaptor, Test Report, Carrying Case

Ordering Information

PON-204B	PON Power Meter

Visual Fault Locators

VFL-1A

PRECISION RATED OPTICS

3-Year Warranty!

The VFL-1A is a well-made, compact, powerful Visible Light Source with three (3) variable output levels including 0 / 3 / 8 dBm. The VFL-1A can be used to locate sharp bends and breaks in jacketed or bare fiber up to 10km in length. It can also be used to identify connectors in patch panels or to identify fibers during splicing operations.

VFL-5

*Includes Carrying Case

The VFL-5 is a compact, powerful Visual Fault Locator with an output power of up to 1mw. The VFL-5 can be used to detect sharp bends and breaks in jacketed or bare fiber. It can also be used to identify connectors in patch panels or to identify fibers during splicing operations.

VFL-10

*Includes Carrying Case

The VFL-10 Visual Fault Locator is a "pen" style, compact, visible Laser Source with a powerful 8dBm output, which can be used to locate sharp bends or breaks in bare or jacketed fiber up to 10km in length. It can also be used to identify connectors in patch panels, or to identify fibers during splicing operations.

SPECIFICATIONS

Item / Model No.	VFL-1A	VFL-10	VFL-5
Wavelength (nm)	650 (±10)	650 (±10)	650 (±10)
Emitter Type	LD	FP, LD	FP, LD
Connector Type	FC/ST/SC	Universal Standard 2.5mm, External 1.25mm Adaptor	Universal 2.5 mm
Modulated Frequency (Hz)	2	2 to 3	2
Output Power	0, 3, 8 dBm (Adjustable)	1mw (10mw Optional)	1mW (10mw Optional)
Power Supply	AC/DC Adaptor & Li-ion Battery	AA Alkaline Batteries (x2)	AAA Alkaline Batteries (x2)
Battery Life	20 Hours	>15 Hours	> 40 Hours
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)	14°F ~ 113°F (-10°C ~ 45°C)	14°F ~ 140°F (-10°C ~ 60°C)
Storage Temperature	-14°F ~ 158°F (-20°C ~ 70°C)	-40°F ~ 158°F (-40°C ~ 70°C)	14°F ~ 158°F (-10°C ~ 70°C)
Environmental Conditions	0 ~ 95% (Humidity)	0 ~ 95% (Humidity)	0 ~ 95% (Humidity)
Weight & Dimension (LxWxH)	4.5" x 2.5" x 1.2" / 5 oz (115 x 65 x 30 mm / 140 g)	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 3-Year Manufacturer Warranty (Extended Warranty Available)	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)

Visual Fault Locator (VFL-1A) Standard Package Includes:

Visual Fault Locator, SC/PC, ST/PC, FC/PC Adaptors, User Manual, AC/DC Power Adaptor, Test Report, Carrying Case

Ordering Information

VFL-1A	VFL-1A Visual Fault Locator
VFL-10	Pen Style Visual Fault Locator
VFL-10/10	Pen Style Visual Fault Locator (10mW)

VFL-5	VFL-5 Visual Fault Locator
VFL-5/10	VFL-5 Visual Fault Locator (10mW)

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

VIP-35 Series
Video Inspection Probe

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, ST Bulkhead Adaptors, LC Bulkhead Adaptor
- 2.5mm Universal Adaptor, 1.25mm Universal Adaptor

PRECISION RATED OPTICS

SPECIFICATIONS

Item / Model No.	VIP-35 Kit	VIP-35 w/Data
Magnification	400X	
Display Size	3.5″	
Dimensions (HxWxD)	5.51″ x 3.03″ x 1.53″	
Weight	15.7 oz	
Display Type	TFT Active Matrix	
Video Output	PAL / NTSC	
Power	12V DC Built-in Li-ion Rechargeable Battery	
Input Power	110-240VAC Adaptor	
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	
Data Storage	No	Yes
Data Download	No	Yes
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)	

VIP-35 Kit Standard Package Includes:

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

VIP-35 w/Data Storage Kit Standard Package Includes:

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

Ordering Information

VIP-35K	3.5″ Video Inspection Kit 2
VIP-35-DATA	3.5″ Video Inspection Kit w/ DATA

Fiber Scopes

PRECISION RATED OPTICS

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 adaptors 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
Adaptor Interface	1.25mm and 2.5mm Universal Adaptors		1.25mm and 2.5mm Universal Adaptors
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 Adaptor, 1.25mm, Universal Adaptor, User Manual, Travel Case

HM-CL Series Fiber Scopes Standard Package Includes:

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

Ordering Information

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

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

OFI-11

Optical Fiber Identifier

3-Year Warranty!

The OFI-11 Optical Fiber Identifier is a rugged, 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-11 comes standard with a 3-Year manufacturer's warranty and includes 0.25mm, 0.9mm, 2.0mm and 3.0mm adaptors to fit various optical cables.

- Identifies Traffic at 270Hz, 1KHz, 2KHz
- Core-Power Display of the Fibers (-50 ~ +0dBm)
- Very Low Loss (Fiber Attenuation) when Testing is in Process
- Included Adaptors: 0.25mm, 0.9mm, 2.0mm and 3.0mm
- Screw-Mounted Plunger Reduces Risk of Fiber Damage

SPECIFICATIONS

Identified Wavelength Range	900 to 1650nm	
Frequencies Detected	(CW) 270Hz (±5%), 1kHz (±5%), 2kHz (±5%)	
Detector Type	InGaAs 2pcs	
Adaptor 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 Indicators	
Optical Power Reading	@ 1310nm	-20dBm ~ +11dB (Continuous Wave) -10dBm ~ +11dB (Modulated Signal)
	@ 1550nm	-30dBm ~ +11dB (Modulated Signal) -18dBm ~ +11dB (Continuous Wave)
Signal Frequency	270Hz, 1kHz, 2kHz	
Power Supply	1.5V AA Batteries (x2)	
Operating Temperature	14° F ~ 122° F (-10° C ~ 50° C)	
Storage Temperature	-14° F ~ 158° F (-20° C ~ 70° C)	
Dimension (LxWxD)	7.95" x 2.4" x 1.4" (202 x 62 x 36 mm)	
Warranty	Standard 3-Year Manufacturer Warranty (Extended Warranty Available)	

OFI-11 Standard Package Includes:
OFI, Adaptors (0.25mm, 0.9mm, 2.0mm and 3.0mm), Batteries, User Manual, Soft Carrying Case

Ordering Information

OFI-11	OFI-11 Optical Fiber Identifier

PRECISION RATED OPTICS

OFI-30

Optical Fiber Identifier

PRECISION RATED OPTICS

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 Adaptors: 0.25mm, 0.9mm, 2.0mm and 3.0mm

SPECIFICATIONS

Identified Wavelength Range	800 ~ 1700nm
Frequencies Detected	(CW) 270Hz (±5%), 1kHz (±5%), 2kHz (±5%)
Detector Type	InGaAs
Adaptor 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
Optical Power Reading	-50 ~ +10dBm
Signal Frequency	270Hz, 1kHz, 2kHz
Power Supply	9V Alkaline Battery
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Storage Temperature	-13°F ~ 158°F (-25°C ~ 70°C)
Dimensions	7.6" x 1.1" x 1" (195 x 30 x 27 mm)
Warranty	Standard 1-Year Manufacturer Warranty (Extended Warranty Available)

OFI-30 Standard Package Includes:

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

Ordering Information

OFI-30	OFI-30 Optical Fiber Identifier

All Products Sold, Serviced and Supported in the USA!

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

CS-125/250 *Bulkhead Cleaner*

CS-125

CS-250

The PRO CS-125 "Quick-Click" is a mechanical cleaning tool designed to clean connectors residing in an adaptor, 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.

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
- Over 800+ Cleanings per Unit
- Dry Cleaning Material Eliminates the Need for Solvents
- Crush-Resistant to Over 250N

Effective Against Following Contaminates

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

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

PRECISION RATED OPTICS

SPECIFICATIONS

CS-125	• 800+ Cleanings per Unit • Cleans LC and MU Connectors with PC and APC Polishes • Cleans Connectors Loaded in a Bulkhead Adaptor and on Unmasked Cable Assemblies • RoHS Compliant
CS-250	• 800+ Cleanings per Unit • Cleans SC, ST, FC and E2000 Connectors with PC and APC Polishes • Cleans Connectors Loaded in a Bulkhead Adaptor and on Unmated Cable Assemblies • RoHS Compliant

Ordering Information

CS-125	1.25mm Bulkhead Cleaner
CS-250	2.5mm Bulkhead Cleaner

Product Selection Tool
Fiber Test and Troubleshooting Instruments

PRECISION RATED OPTICS

	Optical Loss Test Set	Visual Fault Locator	Optical Fiber Identifier	OTDR	Video Inspection Probe	Optical Loss Multimeter	Optical Break/ Fault Locator
Inspect end-face contaminaiton 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 contaminaiton 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

Phone: (888) 545-1254 • Fax: (415) 358-4602
Email: Sales@PrecisionRatedOptics.com

PRECISION RATED OPTICS

Splicer Comparison Sheet

Description	PRO-730	PRO-790	PRO-810	FITEL S178A	Sumitomo Type Q 101	FSM-70S
Applicable Fibers	SM, MM, DS, NZ-DS, EDF	SM, MM, DS, NZ-DS(G655), G655, G657 and others	SM,MM,DS,NZ-DS,EDF and others	SM, MM, DS, NZ-DS, EDF	SM, MM, DS, NZ-DS	SM, MM, DS, NZ-DS
Average Splice Loss (dB)	0.02 SM, 0.01 MM, 0.04 DS, 0.04 NZDS	0.01db (MM), 0.02db (SM), 0.05db (DS/NZDS/G.655/G.657)	.02dB(SM), .01dB(MM), .04dB (NZ-DS)	0.02 SM, 0.01 MM, 0.04 DS	0.02 SM, 0.01 MM, 0.04 DS	0.02 SM, 0.01 MM, 0.04 DS, 0.04 NZDS
Splice Time	8 Seconds	8 Seconds	8 Seconds.	7 Seconds	7 Seconds	12 Seconds (AUTO mode)
Heater Time	40 Seconds	35 Seconds.	30 Seconds	25 Seconds	28 Seconds (equipped with dual heaters)	14-17 Seconds
Splicing Method	Core Alignment	Core Alignment	Core Alignment	Core Alignment	Core Alignment	Core Alignment
Cladding Diameter	100 to 150 um	80-150 um	100-150 um	80 to 150 um	80-150 um	80-150 um
Monitor	5.1" Color LCD	3.5" Color LCD, 200x	Color 5.0"in diagonal HD LCD, 360x Magnification	3.5"	4.1" Color LCD	4.73" Color LCD
Data Storage	8000 Splices	10000 Splice Records	8000 Splices	2000 Splices	10,000 Splices	2,000 Splices
Warranty	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year
Annual Clean & Calibrate During Warranty	Yes	Yes	Yes	No	No	No

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Corporate Office
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Manufacturing & Testing

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