Cable Contractor Solution Overview

Get it done. Fast.

Multi-test capability, longer battery life, and a single common interface make VIAVI instruments the best in the game.
Why VIAVI is great for cable contractors

Fast, Simple Testing
- Perform all needed tests and document results quickly – comprehensive “check” modes
  - Trusted solutions for service providers and their contractors

Value solution – low price, high quality (application focused models, Encore)
- Industry leading best-in-class local support, Sales and complementary Technical Assistance
- Innovative solutions – award winning products

Real-time documentation and instrument inventory management
- Simple workflow and test documentation that proves work performed completely with certified results (StrataSync)
  - Quick, simple documentation speeds payment for services rendered
  - Automatic syncing of test data with cloud-based StrataSync (saving and sharing results w/ company you’re working for)
- Test equipment inventory management, including anti-theft system that brings down number of meters lost or stolen

Industry leading best-in-class local support
- Warranty – trusted reliability, backed by warranty
- Training
  - Recorded webinars
  - Videos
  - Quick start manuals and user guides
  - Complementary Technical Assistance

Support Center
When you select VIAVI solutions, we commit to helping you optimize your network and business performance.
Table of Contents

Solutions for Cable Service ....................... 4
Essential Installation and Troubleshooting Tests
180 DSP-Lite....................................................... 6
180 DSP ................................................................. 7

DOCSIS Installation and Service
360 DSP................................................................. 8
1G DSP with TDR .................................................... 9

Modular, Upgradeable Installation/Service Meter
OneExpert™ CATV .................................................. 10

Seeker Home Leakage Test Kit ............. 11
Leakage/Ingress Mitigation Tools
Seeker D Lite.......................................................... 12
Seeker D ................................................................. 13

Fiber Installation Test Tools
MP-60/80.............................................................. 14
P5000i USB Connector Inspection Probe.....15
FiberChek Probe Inspection Scope .............. 16
FJ-60 Fiber Identifier............................................ 17
FFL-050/-100 Visual Fault Locator ............... 18
SideWinder MPO/MTP® ...................................... 19
OLP-3x ................................................................. 20
OCC-5x CWDM/DWDM ........................................ 21
OTDRs ................................................................. 22
SmartOTDR .......................................................... 23
T-BERD/MTS-2000 ............................................. 24
T-BERD/MTS-4000 V2 ....................................... 25
4100 Series Module ............................................ 26
Fiber Complete Module ..................................... 27
T-BERD 5800 ....................................................... 28

WiFi Installation Optimization and Troubleshooting
WiFi Advisor™ .................................................... 29

Workflow Efficiency
StrataSync .......................................................... 30
Solutions for Cable Service Installation Contractors

- RFoG, EPON, GPON, HFC, DOCIS
- Ethernet, Business Services, CWDM, DWDM

- WiFi Analyzer
  Analyzer/Optimizer

- 360 DSP

- ONX CATV

- SmartOTDR
  PON OTDR

- T-BERD/MTS-2000
  OTDR FiberComplete
  CWDM/DWDM OTDR

- T-BERD/MTS-4000 V2
  OTDR FiberComplete
  CWDM/DWDM OTDR

- FI-60
  Live Fiber Identifier

- Smart Pocket OLP-3x
  Optical Broadband Power Meters

- FFL-050/-100
  Visual Fault Locator (VFL)

- OCC-5x CWDM/DWDM
  Power Meters

- PS000i
  Fiber Inspection

- FiberChek
  Fiber Inspection

- MP-60/80
  USB Optic Power Meter

- Seeker D
  Leakage Detection/Monitoring

- SideWinder MPO/MTP®
  Inspection Scope

- T-BERD 5800

- 4100 Series Modules
  OTDR and OSA

- Home Leakage Test Kit

- StrataSync™
  Cloud-based instrument asset management
Installation and Service Testing is Essential

Problem:
- Need to ensure that problems are fixed while technician on-site with comprehensive installation testing
- Common issues: craftsmanship, network and component condition or limitations, damage through changes to home network or in unassociated DIY projects, modem provisioning problems, or other network issues that must be referred to maintenance
- Tests are performed at the tap, ground block and CPE locations, and include both RF and service performance verification

Solution:
- Most advanced meters on the market for complete home network installation and service testing, with speed, simplicity and power
- Meter for every tech level and application
- Covering all home networking technologies – fiber, RF and WiFi
- Performance tracking for billing purposes with simple, cloud-based system
Essential Installation and Troubleshooting Tests

180 DSP-Lite
A Trilithic Series Field Meter

- RFoG, EPON, GPON, HFC, DOCIS

Key Features
- 1.25 GHz Frequency range
- Provides cable installers and field technicians a full complement of RF measurement functions
- Auto-discovery of channel plans

Applications
- Return spectrum analysis (4 to 110 MHz)
- Level, C/N measurement
- QAM analysis (MER/BER/Constellation/EQ)
- OFDM (Average level; Max P/V; In-channel tilt; PLC constellation, level, pre/post BER, MER; Decoder stress vs time; Default profile summary)
- Complete channel plan scan with tilt measurement

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>180 DSP-Lite</td>
<td>TRI-DSP-180-LITE</td>
</tr>
</tbody>
</table>
180 DSP

A Trilithic Series Field Meter

- RFoG, EPON, GPON, HFC, DOCIS

Key Features
- 1.25 GHz Frequency range
- Provides cable installers and field technicians a full complement of RF measurement functions
- FDR (Frequency Domain Reflectometer) and Source Generator options
- Auto-discovery of channel plans

Applications
- Return spectrum analysis (4 to 110 MHz)
- Forward Spectrum Analysis (5 to 1250 MHz)
- Level, C/N, Hum measurement
- QAM analysis (MER/Ber/Constellation/EQ)
- OFDM (Average level; Max P/V; In-channel tilt; PLC constellation, level; pre/post BER, MER; Decoder stress vs time; Default profile summary)
- Complete channel plan scan with tilt measurement
- Ping, trace route, VoIP and throughput measurements

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>180 DSP (Base Model)</td>
<td>TRI-DSP-180-BASE</td>
</tr>
<tr>
<td>180 DSP (Advanced Model, includes FDR ad Source)</td>
<td>TRI-DSP-180-ADV</td>
</tr>
</tbody>
</table>
**360 DSP**

A Trilithic Series Field Meter

- RFoG, EPON, GPON, HFC, DOCIS

---

**Key Features**

- 1.25 GHz frequency range
- DOCSIS 3.1 signal and service tests
- Advanced home certification capabilities simplify installation and troubleshooting
- Intuitive color touch screen with simple pass/fail indicators reduces installer entry errors and improves decision making
- Next-generation autotest apps streamline certification
- Convenient multiple standard tests in a single autotest app help to standardize tech processes and procedures
- Multi-user, multi-language support
- Create jobs right on the meter
- Built-in web browser, real-time data transmission

---

**Ordering Information**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>360 DSP – (Base Model)</td>
<td>TRI-DSP-360-D31-BASE</td>
</tr>
<tr>
<td>360 DSP – (Advanced Model, adds FDR and Source)</td>
<td>TRI-DSP-360-D31-ADV</td>
</tr>
<tr>
<td>360 DSP – (Pro Model, adds Linear Distortion Tests, Traffic Control Plus, and Ingress Under QAM)</td>
<td>TRI-DSP-360-D31-PRO</td>
</tr>
</tbody>
</table>
1G DSP with TDR

A Trilithic Series Field Meter
- RFoG, EPON, GPON, HFC, DOCIS

Highlights
- Provides cable installers and field technicians a full complement of RF measurement functions
- Powerful troubleshooting tools to improve overall system health
- When TDR test is needed, tech simply switches to an alternate test mode on meter
- No need to return to truck (or office) to get a TDR

Key Features
- Color touch screen reduces installer entry errors and improves decision making
- A high quality, accurate, precise TDR included in 1G DSP
- Multiple tests in a single autotest app provide a convenient way to standardize tech processes and procedures

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1G DSP PRO - TDR w/FSA-HUM-FDR-SRC-TCP-LDT-EVS</td>
<td>TRI-DSP-1G-D31-TDR-PRO</td>
</tr>
<tr>
<td>1G DSP SWEPELESS - TDR w/FWD/REV Sweepless Sweep</td>
<td>TRI-DSP-1G-D31-TDR-SWPLS</td>
</tr>
<tr>
<td>1G DSP SWEEP - TDR w/FWD/REV Sweepless-Active Sweep</td>
<td>TRI-DSP-1G-D31-TDR-SWEEP</td>
</tr>
</tbody>
</table>
Modular, Upgradeable Installation/Service Meter

OneExpert™ CATV

- RFoG, EPON, GPON, HFC, DOCSIS

Key Features
- Real-time channel identification eliminates the need for channel plans and plan-related errors
- 32x8 DOCSIS 3.0, DOCSIS 3.1, WiFi gigabit Ethernet capable, and TrueSpeed™ option
- Field-exchangeable DOCSIS/RF module
- Unique dual-diplexer design supports 42/85 or 65/204 MHz networks
- WiFi 2.4/5 GHz, Bluetooth, StrataSync enabled
- Simultaneous ingress and downstream testing
- Optional fiber scope and power meter

Applications
- Troubleshooting QAM carriers/home networks
- Verifying WiFi
- Turning up business services
- Testing Gigabit DOCSIS services
- Installing PON/RFoG including inspection, power levels, and RF performance
- Optional IP video testing

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONX-620 Basic</td>
<td>ONX-620D31-4285-1010-BAS</td>
</tr>
<tr>
<td>ONX-620 IPX (adds SmartScan, all-channel MER/BER, DOCSIS test details, Session Expert, Ethernet testing, WiFi AP)</td>
<td>ONX-620D31-4285-1010-IPX</td>
</tr>
<tr>
<td>ONX-620 TSX (adds Channel/DOCSIS Check over time, upstream ICFR)</td>
<td>ONX-620D31-4285-1010-TSX</td>
</tr>
</tbody>
</table>
Seeker Home Leakage Test Kit

A Trilithic Series Field Meter

- RFoG, EPON, GPON, HFC, DOCIS

Key Features
- Dual-band leakage receiver for both aeronautical and LTE frequencies
- Audible tone increases proportionally in pitch as technician moves closer to leak source
- Works with option equipped installation and service meter (DSP or ONX)

Applications
- Find points of potential ingress, even when ambient ingress source is currently not present
- Find leaks that may interfere with other over-the-air services within the home
- Troubleshoot home coaxial network issues quickly, without trial-and-error process

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeker HL Leakage companion kit for ONX and DSP series meters</td>
<td>TRI-LKG-HL-METER-KIT</td>
</tr>
<tr>
<td>DSP Factory HL Leakage Software option</td>
<td>TRI-DSP-SW-HL-LKG-OPT</td>
</tr>
<tr>
<td>ONX Factory HL Leakage Software option</td>
<td>ONX-CATV-SW-HL-LKG</td>
</tr>
</tbody>
</table>
Leakage/Ingress Mitigation Tools

Seeker D Lite
A Trilithic Series Field Meter

- RFoG, EPON, GPON, HFC, DOCIS

Key Features
- Dual-mode/dual-frequency in-home leakage detector
- Monitors leakage in all-digital or mixed digital and analog systems
- Cost-effective solution uses CT-4 Channel Tagger or Seeker D Lite Source Transmitter
- With Seeker D Lite Source Transmitter at Ground Block, attains 0.1 μV/m sensitivity

Applications
- Find the smallest of leaks and Ingress points in the customer premise
- Detects low level leaks to ensure network immunity from in-home cellular transmission interference

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeker D Lite Leakage Detector</td>
<td>TRI-LKG-SEEKER-D-LITE</td>
</tr>
<tr>
<td>Seeker D Lite Source Transmitter</td>
<td>TRI-LKG-SKR-DLITE-SOURCE</td>
</tr>
</tbody>
</table>
Seeker D

A Trilithic Series Field Meter

- RFoG, EPON, GPON, HFC, DOCIS

Key Features

- Dual-mode/dual-frequency leakage detector
- Accurately detects and measures signal leakage near LTE and aeronautical frequency bands
- Unsurpassed sensitivity from 2 to 2000 μV/m
- Monitors leakage in all-digital or mixed digital and analog systems
- Cost-effective solution uses CT-4 Channel Tagger (MSO installs in headend/hub)

Applications

- Find the smallest of leaks
- Detects low level leaks to ensure network immunity from interference
- Can be integrated into leakage management system, using LAW server and GPS

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeker D Leakage Detector without Mobile Mount</td>
<td>TRI-LKG-SEEKER-D-METER</td>
</tr>
<tr>
<td>Seeker D Leakage Detector with Mobile Mount</td>
<td>TRI-LKG-SKR-D-W-MOUNT</td>
</tr>
</tbody>
</table>
Fiber Installation Test Tools

MP-60/80

- RFoG, EPON, GPON, HFC, DOCIS
- Ethernet, Business Services, CWDM, DWDM

Key Features
- Lightweight, small form-factor design for ultimate portability
- Generates measurements in dB, mW, and dBm with auto-voice readout option
- Simple, accurate, and instant push-button measurement results can be electronically archived, logged, and printed
- Dedicated for all single-mode and multimode applications including LAN, telecom, CATV, and DWDM testing
- Automated data-logging capabilities
- Automatic wavelength detection
- Measures optical power with multiple pre-calibrated wavelengths: 980/1310/1480/1550 nm

Applications
- Measure general power and loss as well as high power applications in long-haul, metro, access and local area networks with wavelengths ranging from 780 to 1625 nm
- Use with a VIAVI light source to detect modulation frequency and identify individual fibers
- Integrate with other VIAVI test devices (T-BERD/MTS-5800, SmartOTDR, OneExpert, CellAdvisor, DSP), PC (FiberChekPRO), or mobile device (FiberChekMOBILE) to run tests, export data, provide certification reports and manage acceptance criteria

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-60 USP optical power meter, includes software, 2.5mm interface, 1.25 interface, 30” (75cm) USB extender, carrying pouch</td>
<td>MP-60A</td>
</tr>
<tr>
<td>MP-80 USB optical power meter, High Power - Includes software, 2.5mm interface, 1.25 interface, 30” (75cm) USB extender, carrying pouch</td>
<td>MP-80A</td>
</tr>
</tbody>
</table>
P5000i USB Connector Inspection Probe

- RFoG, EPON, GPON, HFC, DOCIS
- Ethernet, Business Services, CWDM, DWDM

Key Features
- Connects via USB with multiple devices including VIAVI tools, laptops/PCs, and Android mobile devices
- Repeatable pass/fail analysis eliminates subjective guesswork from measurement process
- User-selectable acceptance profiles allow certification to any acceptance criteria
- Includes FiberChekPRO™ software for analysis and reporting with laptops/PCs
- Automatic image centering ensures fiber always appears in screen center
- Detailed report generation to certify and document results
- Dual magnification functionality provides high-level and detailed inspection and analysis
- Magnification toggle button allows easy switching in both live and analysis views
- Accepts FBPT series tips for comprehensive support for all connector types used in today’s network

Applications
- Inspect and certify fiber end-face quality at the push of a button, making your technicians instant fiber experts
- Ensure physical-layer performance by guaranteeing fiber connectivity meets industry standards
- Eliminate confusion with fast, easy, and objective testing
- Certify fiber end-face quality with your existing VIAVI test platform or mobile device

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>P5000i Digital USB Fiber Inspection Probe (6-tip kit): soft case,</td>
<td>FBP-SD101-CATV</td>
</tr>
<tr>
<td>inspection tips for SC-UPC, SC-APC and LC-UPC</td>
<td></td>
</tr>
</tbody>
</table>

viavisolutions.com
FiberChek Probe Inspection Scope

- RFoG, EPON, GPON, HFC, DOCIS
- Ethernet, Business Services, CWDM, DWDM

**Key Features**
- Connector inspection probe with integrated touchscreen display – works autonomously or with VIAVI test sets, laptops/PCs and iOS/Android mobile devices
- Fully automated operation: auto focus, auto image centering and auto pass/fail analysis
- Integrated IEC61300-3-35 pass/fail analysis eliminates subjective guesswork and ensures everyone gets the same results
- User-selectable acceptance profiles allow certification to any acceptance criteria
- Includes FiberChekPRO™ software for analysis and reporting with laptops/PCs
- Detailed report generation to certify and document results
- WiFi/BlueTooth connectivity
- Dual magnification with toggle button allows easy switching in both live and analysis views
- 300+ FBPT series tips for comprehensive support for all connector types used in today’s networks

**Applications**
- Inspect and certify fiber end-face quality at the push of a button, making your technicians instant fiber experts
- Ensure physical-layer performance by guaranteeing fiber connectivity meets industry standards
- Eliminate confusion with fast, easy, and objective testing
- Certify fiber end-face quality autonomously or with existing VIAVI test platforms and mobile devices

**Ordering Information**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FiberChek Probe Wireless Inspection Probe (4-tip kit): soft case, inspection tips for SC/UPC, SC/APC</td>
<td>FIT-CATV-KIT3</td>
</tr>
<tr>
<td>FiberChek Probe Wireless Inspection Probe (8-tip kit): soft case, inspection tips for SC/UPC, SC/APC, LC/UPC, and LC/APC</td>
<td>FIT-CATV-KIT2</td>
</tr>
<tr>
<td>FiberChek Probe Wireless Inspection Probe (4-tip kit) with MP-60 USB Power Meter: soft case, inspection tips for SC/UPC, SC/APC</td>
<td>FIT-CATV-KIT4</td>
</tr>
</tbody>
</table>
**FI-60 Fiber Identifier**

- RFoG, EPON, GPON, HFC, DOCIS
- Ethernet, Business Services, CWDM, DWDM

### Key Features
- SafeChek easy-pull trigger system ensures repeatable engagement with fiber cable
- LFI head accepts multiple cable diameters (250μm to 3mm) jacketed fibers
- Durable metal input adapters (2.5 and 1.25mm) for OPM
- Measure both absolute (dBm) and relative (dB) power
- Store and recall up to 100 OPM readings

### Applications
- Avoid network downtime and damage with repeatable SafeChek™ easy-pull trigger system
- Get the job done faster with a single LFI head that is compatible with multiple cable diameters (250μm to 3mm jacketed fibers)
- Increase reliability and avoid false readings with integrated ambient light shield
- Access cable in multiple environments with the compact, ergonomic design
- Easily convert to a full function OPM that stores, recalls, and exports results to a PC via USB

### Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Fiber Identifier w/ removable LFI attachment, 2.5 mm and 1.25mm OPM connector interfaces; USB cable; software; carrying case</td>
<td>FI-60</td>
</tr>
</tbody>
</table>
Fiber Installation Test Tools

FFL-050/-100 Visual Fault Locator

- RFoG, EPON, GPON, HFC, DOCSIS
- Ethernet, Business Services, CWDM, DWDM

Key Features
- Compact, ergonomic design for ultimate portability
- Visible wavelength is 650 nm
- High powered laser (1 mW) for single-mode (> 7 km) and multi-mode (> 5 km) connectors
- Continuous or Flash illumination
- Universal connector interface for quick and easy connection
- 2.5 mm connector input (1.25 mm adapter available)

Applications
- Locate sharp bends, breaks, and damages in fiber
- Conduct end-to-end continuity tests
- Perform fiber tracing and identification

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual fault locator (ruggedized) with 1.25 mm adapter</td>
<td>FFL-100</td>
</tr>
<tr>
<td>Visual fault locator (pocket-sized)</td>
<td>FFL-050</td>
</tr>
</tbody>
</table>
SideWinder MPO/MTP® Inspection Scope

Key Features
- Fully automated inspection and analysis of multifiber MPO/MTP® ribbon fiber connectors with results in under 12 seconds!
- Integrated touchscreen display gives users full control to view live images and analysis results, pan & scroll across the end face to view each fiber, and easily navigate results
- Integrated IEC61300-3-35 pass/fail analysis eliminates subjective guesswork and ensures everyone gets the same results
- User-selectable acceptance profiles allow certification to any acceptance criteria
- Includes FiberChekPRO™ software for analysis and reporting with laptops/PCs
- Detailed report generation to certify and document results
- WiFi/USB connectivity for use with PC/laptop or mobile devices
- Dual magnification with toggle button allows easy switching in both live and analysis views
- Also tests simplex fibers (compatible with 300+ FBPT series inspection tips)

Applications
- Inspect and certify multifiber MPO/MTP® ribbon fiber end-face quality at the push of a button, making your technicians instant fiber experts
- Ensure physical-layer performance by guaranteeing fiber connectivity meets industry standards
- Eliminate confusion with fast, easy, and objective testing

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewinder Automated MPO/MTP® Inspection Test Kit: soft case, Bulkhead and Patchcord inspection tips for APC &amp; UPC connectors</td>
<td>FIT-FCSW-KIT2</td>
</tr>
</tbody>
</table>
**OLP-3x Optical Broadband Power Meter**

- **RFoG, EPON, GPON, HFC, DOCIS**
- **Ethernet, Business Services, CWDM, DWDM**

### Key Features
- Cost-effective, rugged, and compact power meters up to +26 dBm
- Universal 2.5 mm optical interface (optional 1.25 mm adapter)
- Auto and TwinTest transmission modes
- 3-year calibration
- Internal data storage with PC download capability
- Multiple calibrated wavelengths (850, 980, 1300, 1310, 1490, 1550, 1625 nm) with ability to store custom wavelengths from 780 to 1650 nm, in 1 nm steps

### Applications
- Measure optical power levels and link insertion loss
- Fiber Deep, RFoG, PON, Enterprise/LAN, Access and Metro (LAN/WAN) networks
- Standard and high-power level tests for use in telecom, CATV, and military applications

### Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLP-35 (+10 dBm) Broadband Power Meter, 2.5 mm UPP adapter</td>
<td>2302/12</td>
</tr>
<tr>
<td>OLP-38 (+26 dBm) Broadband Power Meter, 2.5 mm UPP adapter</td>
<td>2302/13</td>
</tr>
<tr>
<td>LC adapter for OLP-35/38 (UPP-1.25 mm)</td>
<td>2256/90.03</td>
</tr>
</tbody>
</table>
OCC-5x CWDM/DWDM Power Meters

- Ethernet, Business Services, CWDM, DWDM

Key Features
- DWDM or CWDM channel checkers are ideal for field service groups tasked with the installation, maintenance, and upgrades of xWDM systems
  - DWDM:
    - Supports C-band applications (1528.77 to 1564.68 nm; 196.10 to 191.60 THz)
    - ~ 10 s (full span, 46 ch) typ.
    - Supports 100 or 200 GHz channel spacing (according to ITU-T)
  - CWDM: Supports all 18 ITU-T defines channels (1271 – 1611 nm)
  - User selectable graphical or tabular display modes
  - Save results via internal memory or external USB memory stick
  - Report generation software OFS-355

Applications
- Verify channel presence and power levels
- DWDM, CWDM, Fiber Deep, NGAN, DAA, and Metro networks

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCC-55 (CWDM Power Meter) w/ SC-APC connector</td>
<td>2277/43</td>
</tr>
<tr>
<td>OCC-56C (DWDM (C-band) Power Meter) w/ SC-APC connector</td>
<td>2277/44</td>
</tr>
</tbody>
</table>
OTDRs

An OTDR is a fiber optic tester for the characterization of optical networks that support telecommunications. The purpose of an OTDR is to detect, locate, and measure elements at any location on a fiber optic link. An OTDR needs access to only one end of the link and acts like a one-dimensional radar system. By providing pictorial trace signatures of the fibers under test, it’s possible to get a graphical representation of the entire fiber optic link.

Smart Link Mapper (SLM)

An optical time domain reflectometer (OTDR) is an essential fiber test tool that helps service providers ensure that their fiber network infrastructure is optimized to deliver reliable and robust services. OTDR operation and usability has been simplified over the years; however, it is still considered an advanced instrument to operate and interpreting measurement results can be complex. The Smart Link Mapper (SLM) intelligent optical software application helps technicians use an OTDR more effectively, without the need to understand or interpret OTDR results. Each event is displayed as an icon giving users a schematic view of the entire link, known as SmartLink. SLM can completely correlate to the original OTDR trace as experts desire.

With this common approach to simplify OTDR testing and streamline the procedures, four tailored SLM OTDR applications are available for different network types Enterprise-SLM, FTTA-SLM, FTTH-SLM and Cable-SLM.

**Application**
- Installation and commissioning of enterprise, access, and metro networks
- Installation and maintenance of wireless backhaul
- Link characterization of long/xWDM networks
- Troubleshooting of any fiber network
- Singlemode and multimode fiber links

**Key Features**
- Eliminates OTDR results interpretation complexity
- Directly correlates SmartLink view results and OTDR trace
- Immediately diagnoses problems
- Automatic pass/fail results
- Compatible with all multimode/singlemode and OTDR modules
- Enabled on SmartOTDR and all recent T-BERD/MTS-2000, -4000 V2, -6000A v2, and -8000 OTDR platforms
- Upgradable on site
Fiber Installation Test Tools

SmartOTDR

Key Features

- Single-/dual-/tri-wavelength versions with 1310/1550 nm and in-service 1625 or 1650 nm wavelengths
- Light, compact, hands-free design includes 5” high-visibility outdoor touch screen
- Integrated CW light source on OTDR port
- Simplifies OTDR analysis with Smart Link Mapper (SLM) option
- PON optimized to test through a 1x128 splitter
- Built-in PON/XG-PON power meter (1490/1550/1578 nm)
- Automated OTDR test and macrobend detection with objective pass/fail results
- Supports automated fiber inspection and IEC pass/fail analysis (P5000i)
- 3G/4G connectivity via USB, Bluetooth®/WiFi options
- All-day battery life
- Cost-effective (3yr warranty)

Applications

- Characterize point-to-point HFC, access and metro fiber networks
- Qualify and troubleshoot FTTH/PON networks
- Combines all essential fiber tests in one handheld with visual fault locator (VFL), optical power meter (OPM), and P5000i microscope options

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>SmartOTDR Single Mode 1310/1550nm (37/35dB) OTDR kit: SC/APC connector, hands-free carry case</td>
<td>SmartOTDR126A-P0A</td>
</tr>
<tr>
<td>SmartOTDR Single Mode 1310/1550nm (37/35dB) OTDR kit with VFL and Power Meter: SC/APC connector, hands-free carry case</td>
<td>SmartOTDR126A-P1A</td>
</tr>
<tr>
<td>SmartOTDR Single Mode 1310/1550nm plus filtered 1650 nm (37/35/32dB) OTDR kit: SC/APC connector, hands-free carry case</td>
<td>SmartOTDR138FA-P0A</td>
</tr>
</tbody>
</table>
T-BERD/MTS-2000

Key Features
- High-visibility 5 inch touch-screen display
- Field-installable modules (cross-compatible with T-BERD/MTS-4000 and 4000V2)
- Wide range of OTDR modules including Quad, PON, CWDM and DWDM (4100 series modules)
- FiberComplete module (automated bi-directional IL/ORL/OTDR) certification
- CWDM OSA analyzer module
- Simplifies OTDR analysis with Smart Link Mapper (SLM) option
- Supports automated fiber inspection and IEC pass/fail analysis (P5000i)
- Optional built-in optical power meter, visual fault locator (VFL), and optical talk set
- New-generation lithium polymer (LiPo) battery for 8-hour operation
- Flexible connectivity with Ethernet, USB, Bluetooth®, and WiFi capabilities
- Cost-effective (3yr warranty)

Applications
- Characterize point-to-point HFC, access and metro fiber networks
- Combines all essential fiber tests in one handheld with visual fault locator (VFL), optical power meter (OPM), and P5000i microscope options
- Ensure the highest-quality connectorizing, splicing, and turn-up of new fiber links

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-BERD/MTS-2000 Handheld Modular Test Set (mainframe only)</td>
<td>ETB2000HVT/EM2000HVT</td>
</tr>
</tbody>
</table>
T-BERD/MTS-4000 V2

RFoG, EPON, GPON, HFC, DOCIS

Ethernet, Business Services, CWDM, DWDM

Key Features

- 9-inch high visibility multi-touch screen with 7-inch results display and permanent function keys
- Dual-modular platform with field-replaceable modules
- Field-installable modules (cross-compatible with T-BERD/MTS-2000)
- Wide range of OTDR modules including Quad, PON, CWDM and DWDM (4100 series modules)
- FiberComplete module (automated bi-directional IL/ORL/OTDR) certification
- CWDM OSA analyzer module
- Simplifies OTDR analysis with Smart Link Mapper (SLM) option
- Supports automated fiber inspection and IEC pass/fail analysis (P5000i)
- Optional built-in optical power meter, visual fault locator (VFL), and optical talk set
- Workflow management and guidance for error free test
- Report Generation – on-board instrument, via PC/laptop (FiberCable SW suite) and StrataSync
- Cost-effective (3yr warranty)

Applications

- Full network lifecycle: Construction, Activation, Maintenance and Troubleshooting
- Combines all essential fiber tests in one handheld with visual fault locator (VFL), optical power meter (OPM), and P5000i microscope options
- FTTH: PON optimized OTDR and selective power meters for E-PON, G-PON, XGS-PON, NG-PON2 networks
- Hybrid CWDM/DWDM: combined CWDM or DWDM OTDR and C-OSA test platform
- Metro Core: long haul OTDR for high speed 10G/40G/100G fiber link qualification

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-BERD/MTS-4000 V2 Platform</td>
<td>ETB4000V2 / EM4000HVT</td>
</tr>
</tbody>
</table>
## Key Features
- Wide range of OTDR modules including Quad, PON, CWDM and DWDM
- Up to 45 dB dynamic range and 256,000 acquisition points
- PON modules optimized to test through up to a 1x128 and 1x256 splitter
- Simplifies OTDR analysis with Smart Link Mapper (SLM) option
- Single-/Dual-/Tri-wavelength versions with 1310, 1490, 1550, 1625, and 1650 nm
- Single connector port for 1310, 1550 and in-service 1625 or 1650 nm wavelengths
- Integrated light source and power meter on OTDR port
- Available in FiberComplete version for automated bi-directional OTDR, IL and ORL measurements

## Applications
- Characterize point-to-point HFC, access and metro fiber networks
- Construction, commissioning and troubleshooting of Metro and Long-Haul networks
- Qualification and troubleshooting of FTTH-PON networks (fiber distribution and drop cables verification and test through splitters)
- Enterprise and Wireless

## Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA OTDR Module (last mile in access)</td>
<td>E4126LA / E4115LA</td>
</tr>
<tr>
<td>MA2 OTDR Module (point to point)</td>
<td>E41126MA2-PC / -APC</td>
</tr>
<tr>
<td>MA3 OTDR Module (point to multi-point and longer haul point to point)</td>
<td>E4126MA3-PC / -APC and E4136MA3-PC / -APC</td>
</tr>
<tr>
<td>CWDM OTDR Modules (8 upper, 10 upper, 10 lower wavelengths)</td>
<td>E41CWDM8U / E41CWDM10U / E41CWDM10L</td>
</tr>
<tr>
<td>DWDM OTDR Module</td>
<td>E41DWDMC-PC / -APC</td>
</tr>
</tbody>
</table>
You can now equip each technician with a single piece of equipment that fulfills all of the traditional fiber testing requirements. FiberComplete is the only solution to perform all the fundamental fiber-qualification tests, such as bidirectional insertion loss (IL), optical return loss (ORL), and optical time domain reflectometry (OTDR) in one module from one optical port, using one fiber connection with one button-push operation. FiberComplete cuts testing in half with fewer connection and disconnections, automatic continuity check and an intelligent fault finder, minimizes training and gets reliable measurements using a fully automated process with easy-to-read results, and optimizes workflow by compiling tests results into one complete cable view and automatically storing all measurements in one folder. Based on the 4100 series MA3 modules this unique automated solution saves 50% testing time on fiber optic network deployment and is the only bi-directional loss test set on the market that can characterize splices and connectors, and locate faults.

**Application**
- Certification, maintenance and troubleshooting of any fiber optic links
- Installation and commissioning of Access, Middle Mile and Metro networks
- FTTH/PON network construction and acceptance testing
- Automatically measure bidirectional OTDR, IL, and ORL with one unit
- Troubleshoot in FaultFinder mode for immediate results

**Key Features**
- Single module, single port testing
- Make one connection, one-touch automated measurements
- Approx. 2 min 40 secs for full bidirectional certification (inc. report generation)
- Real-time continuity check and automatic product pairing
- Full setup exchange between instruments
- Manage fiber and cable results with on-board report generation
- Step by step wizard for initial IL/ORL test referencing
- Based on MA3 module, supported on T-BERD/MTS-2000, -4000 V2

**Specifications**

<table>
<thead>
<tr>
<th>Bi-directional Testing</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>1310 / 1550 / 1625 nm</td>
<td>MA3 FiberComplete Module E4126MA3FCO-PC / -APC &amp; E4136MA3FCO-PC / -APC</td>
</tr>
<tr>
<td><strong>Insertion Loss</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic range</td>
<td>40 dB typical</td>
<td></td>
</tr>
<tr>
<td>IL uncertainty</td>
<td>+/-0.25 dB</td>
<td></td>
</tr>
<tr>
<td>IL repeatability</td>
<td>&lt;0.05 dB</td>
<td></td>
</tr>
<tr>
<td>Display resolution</td>
<td>0.01 dB</td>
<td></td>
</tr>
<tr>
<td><strong>ORL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORL range</td>
<td>up to 45 dB</td>
<td></td>
</tr>
<tr>
<td>ORL uncertainty</td>
<td>+/-0.9 dB</td>
<td></td>
</tr>
<tr>
<td>Display resolution</td>
<td>0.01 dB</td>
<td></td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>Measurement range</td>
<td>150 km</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>+/-30 m</td>
</tr>
</tbody>
</table>
T-BERD 5800

Ethernet, Business Services, CWDM, DWDM

Key Features
- Fully-loaded TDM/PDH to dual 10 G Ethernet, SONET, SDH, Fibre Channel, and OTN support
- Automated, enhanced RFC 2544 and SAMComplete testing per ITU-T Y.1564
- Integrated burst testing approach per MEF 34 and RFC 6349 TrueSpeed™ TCP throughput testing
- Single- and dual-port versions
- Compatible with VIAVI 4100-Series OTDR and COSA modules with Smart Link Mapper™, fiber microscopes, and optical power meters

Applications
- Mobile and backhaul characterization, validation, and troubleshooting
- Converged Ethernet/IP network testing and troubleshooting at 10 Mbps to 10 G interfaces
- Fiber link characterization and troubleshooting
- Installation and maintenance of OTN and legacy SONET/SDH and TDM/PDH networks
- Remote radio head (RRH) testing at the wireless base station
- PIM and interference testing over optical links (RFoCPRI)

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-BERD S800v2 SINGLE Port Ethernet (to GigE) +PRI-ISDN+VOIP (SIP) Package (10G Ready)</td>
<td>TBS800-CATV-P5</td>
</tr>
<tr>
<td>T-BERD S800v2 DUAL Port Ethernet (to GigE) +PRI-ISDN+VOIP (SIP) Package (10G Ready)</td>
<td>TBS800-CATV-P5-DP</td>
</tr>
<tr>
<td>T-BERD S800v2 SINGLE Port Ethernet (to GigE) +PRI-ISDN+VOIP (SIP) Package</td>
<td>TBS800-CATV-P510</td>
</tr>
<tr>
<td>T-BERD S800v2 DUAL Port Ethernet (to GigE) +PRI-ISDN+VOIP (SIP) Package</td>
<td>TBS800-CATV-P510-DP</td>
</tr>
</tbody>
</table>
WiFi Installation Optimization and Troubleshooting

WiFi Advisor™
- RFoG, EPON, GPON, HFC, DOCIS

Key Features
- Site performance report educates customers
- TrueMargin™ optimizes WiFi site throughput
- Intuitive and easy user interface recommends best channel and optimization steps
- Highly-configurable radio supports 2.4 G 802.11b/g/n and 5 G 802.11a/n/ac up to 3x3 with MIMO
- Associates job- or work-ticket information with site assessment results for export to StrataSync for storage and analysis

Applications
- WiFi troubleshooting and optimization
- Whole-home WiFi performance mapping and throughput analysis
- Wireless IPTV service installation
- End-user education

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>WiFi Advisor standard package: WFED-300AC WiFi Advisor test device, carrying case, USB cable, AC power supply, and power cord</td>
<td>WFED300AC-1PC</td>
</tr>
<tr>
<td>WiFi Advisor installer package: two WFED-300AC WiFi Advisor test devices, carrying case, USB cable, two AC power supplies, and two power cords</td>
<td>WFED300AC-2PC</td>
</tr>
<tr>
<td>VSE interface (iPad Air, WiFi, 16 G)</td>
<td>VSE-INTERFACE</td>
</tr>
</tbody>
</table>
Workflow Efficiency

StrataSync

RFoG, EPON, GPON, HFC, DOCIS

Ethernet, Business Services, CWDM, DWDM

Key Features

- Cloud-enabled architecture provides secure, easy network access from anywhere
- Complete asset management also tracks non-VIAVI instruments
- Automation simplifies update of instrument firmware, options, and configuration files
- No charge for StrataSync Core functionality

Applications

- Instant test data transfer for invoicing
- Centralized management of field instrument software, configuration, and test data
- Floating SW license and option management
- Self admin of instruments (Tech Portal)
- Tech performance tracking

1. Work Orders generated in contractor’s WO system
2. WOs periodically sent to StrataSync
3. Tech syncs meter and receives configs, limits sets, work orders assigned to him
4. Tech selects work order for assigned job, completes test, syncs meter
5. Supv receives daily email with compliance report for their techs
6. Manager compares performance across workgroups, spots areas for improvement
7. API call for automated reporting, back office integration, or data warehousing

• Spots trends
• Determines root cause
• Addresses issue