JDSU Solutions for Enterprise Networks

JDSU offers a complete range of communications test and measurement solutions to address the needs of installers and IT professionals who manage Enterprise local area networks (LANs)—whether installation or maintenance, ongoing testing, or deploying new applications and services. Network professionals must ensure network uptime and reliability, and JDSU offers a comprehensive suite of hardware and software solutions to support this goal.

The JDSU portfolio of Enterprise network testing products includes:

- Wide ranging, cost-effective copper cabling testers—from basic wiremapping to copper cable speed certification
- Industry-leading fiber inspection and test solutions—from end face inspection to optical power meters to multimode and quad wavelength OTDRs
- Active network test capability for troubleshooting and monitoring live IP network performance—from connectivity testing to wirespeed throughput and packet analysis
- Comprehensive multi-function solutions in scalable, modular platforms
Solutions for Testing Enterprise Copper

**TestifierPRO™ Cable Tester**
The TestifierPRO serves as a handheld cable tester that provides cable verification functionality with native network, telephone, and coax cable interfaces.

*Features and Benefits*
- Identifies cable termination on active ports by blinking port LEDs
- Measures cable length
- Identifies opens, shorts, split pairs, reversals, and crossover cable in wiremap format
- Performs single-ended testing to find opens, shorts, and split pairs
- Includes integrated RJ11 and RJ45 jacks and F-connector
- Supports 20 ID-only remote identifiers to trace up to 20 rooms
- Generates tone for tracing
- Identifies cable termination on active ports by blinking port LEDs

**Validator™ Ethernet Speed Certifier**
The Validator offers the best solution for speed certification of copper cabling in Enterprise networks.

*Features and Benefits*
- Certifies a network installation to meet Ethernet data transmission speeds up to 1000Base-T (1 Gbps) using bit error rate (BER) tests
- Measures signal-to-noise ratio (SNR) and Skew to uncover impairments to Ethernet data transmission
- Ensures cable integrity by testing for opens, shorts, split pairs, miswires, and reversals and measures distance to opens and shorts—supports all network, telco, and coax cables
- Identifies cable termination on active Ethernet ports with hub flash
- Creates network layout, documents cable tests, shows network topology, and records moves, adds, and changes with included Plan-Um® software
ValidatorPRO™ Ethernet Speed Certifier with Optical Power Meter

The ValidatorPRO addresses the needs of testing both copper and fiber cabling infrastructure.

Features and Benefits
- Tests fiber cable runs by measuring optical power on single-mode and multimode fiber
- Certifies a network installation to meet Ethernet data transmission speeds up to 1000Base-T (1 Gbps) using BER
- Measures SNR and Skew to uncover impairments to Ethernet data transmission
- Ensures cable integrity by testing for opens, shorts, split pairs, miswires, and reversals and measures distance to opens and shorts—supports all network, telco, and coax cables
- Identifies cable termination on active Ethernet ports with hub flash
- Creates network layout, documents cable tests, shows network topology, and records moves, adds, and changes with included Plan-Um® software

Copper Test Tools

<table>
<thead>
<tr>
<th>Feature</th>
<th>TestifierPRO (TP650/TP655)</th>
<th>ValidatorPRO (NT950)</th>
<th>ValidatorPRO (NT1150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report generation</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Wiremap</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Trace using passive IDs</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Measure length</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Toning (sends tone)</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Distance to opens</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Distance to shorts</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Certify transmission speeds to 1000Base-T on copper cables</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Hub flash</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>Optical power meter</td>
<td>■</td>
<td>■</td>
<td>■</td>
</tr>
</tbody>
</table>
Solutions for Testing Enterprise Fiber

Basic Fiber Inspection Kits (FBE Series)
The FBE Series Fiber Inspection Kits make it easy to inspect both the bulkhead (female) and patch cord (male) sides of a fiber connection with a compact, handheld system.

Features and Benefits
• Provides ergonomic, compact design and controls for easy one-hand operation
• Offers a selection of inspection tips and adapters for common connectors and applications
• Provides crisp, clear view of fiber end face conditions
• Offers rugged, handheld HD3 display with 1.8-in TFT LCD display

Optimized Fiber Inspection Kits (FBP Series)
The FBP Series Optimized Fiber Inspection Kits combine the power of two microscopes into one system for inspecting both sides of the fiber interconnect in less than half the time.

Features and Benefits
• Offers a broad selection of inspection tips and adapters for every connector and application
• Integrated Patch Cord Microscope (PCM) improves workflow
• Provides the ability to inspect both sides of the fiber interconnect in less than half the time!
• Streamlines the Inspect Before You Connect process
• Eliminates changing, mishandling, and misplacing inspection tips for the probe
• Protects patch cords from contamination by parking it in the patch cord microscope

Integrated Inspection/Test Kits
Integrated Inspection/Test Kits make it possible to inspect, clean, and test fiber interconnects in less than half the time with an integrated, portable system.

Features and Benefits
• Drives users to follow best practices for fiber handling in a way that optimizes their workflow and overall performance
• Combines fiber inspection, cleaning, fault detection, and optical power measurement into a simple, hands-free system
• Eliminates switching between different devices
• Promotes proper fiber handling practices
• Portable carrier keeps hands free for other tasks such as logging data, accessing equipment, or routing cable
**Digital Analysis Kits**

Digital Analysis Kits eliminate human subjectivity from end face evaluation by providing automated Pass/Fail analysis at the push of a button.

*Features and Benefits*
- Provides digital live image viewing (dual magnification)
- Connects to PC/laptop via USB 2.0
- FiberChek2 software supports IEC 61300-3-35 End Face standards
- Save, print, and archive images and test results
- Standardize fiber inspection, analysis, and grading processes throughout the fiber network
- Configurability allows for user-defined Pass/Fail criteria settings

**USB Optical Power Meter (MP-60A)**

The USB Optical Power Meter (OPM) provides a small-form-factor OPM that can connect to a PC/laptop and other JDSU devices via USB 2.0.

*Features and Benefits*
- Offers a small-form-factor device that connects to a PC/laptop and other devices via USB 2.0
- Integrates with FiberChek2 software
- Offers compatibility with Validator PRO and other JDSU test devices
- Includes the USB PowerMeter software program
- Generates measurements (dB, dBm, and mW) at multiple pre-calibrated wavelengths: 850, 980, 1300, 1310, 1490, 1550, 1625 nm
- Electronically archives and logs results (manual or automated)
- Physical button on device initiates tests and establishes reference levels

**Visual Fault Locator (FFL-050)**

The Visual Fault Locator helps locate sharp bends, breaks, and damages in fiber.

*Features and Benefits*
- Provides a compact, ergonomic design for ultimate portability
- Offers visible wavelength of 650 nm
- Offers high-powered laser (1 mW) for single-mode (>7 km) and multimode (>5 km) connectors
- Provides continuous or flash illumination
- Provides universal connector interface for quick, easy connection
- Provides 2.5 mm connector input (1.25 mm adapter available)
LAN Optical Power Meter
The OLP-34 SmartPocket™ Optical Power Meter offers an excellent value ratio in a rugged, pocket-sized easy-to-use package. The OLP-34 (Ge detector) is optimized for LAN and wide area network (WAN) Enterprise and supports multimode and single-mode test needs.

Features and Benefits
- Offers rugged, pocket-sized design
- Combines a large display with an easy-to-use interface
- Saves test time and provides error-free testing with the auto-wavelength recognition functionality
- Provides internal data storage (100 results)
- Offers report generation with OFS-355 software
- Accommodates standard AA alkaline batteries that provide >200 hours operation
- Includes a universal optical interface for all 2.5 mm ferrule connectors (1.25 mm interface also available [optional])
- Offers individually settable wavelengths in 1 nm steps
- Offers optional Micro USB interface for power supply and data transfer
- Available for purchase in our SmartPocket Optical Test Kits
- Offers 3-year calibration period

LAN LED Source
The OLS-34 LAN LED Source offers excellent performance at a low price that offers an LED output to enable effective insertion loss and continuity tests in multimode datacom and LANs.

Features and Benefits
- Features a dual wavelength 850/1300 nm 50 µm (CPR compliant) output to support all standard multimode testing needs
- Offers rugged, pocket-sized design
- Combines a large display with an easy-to-use interface
- Offers the option for fixed or interchangeable optical connector adapters to allow maximum configuration flexibility
- Provides auto-wavelength and TWINTest transmission modes
- Accommodates standard AA alkaline batteries
- Offers micro USB interface for AC power supply
- One output port supports both 850 and 1300 nm output
- Offers 3-year calibration period
Quad MM/SM Source

Offering excellent performance at a low price, the Quad Source OLS-36 provides both an LED output for 850 and 1300 nm multimode and a laser output for 1310 and 1550 nm single-mode testing to enable effective insertion loss and continuity tests in a wide range of LAN Datacomm and WAN applications.

Features and Benefits

- The Quad design features both a dual wavelength 850/1300 nm 50 μm (CPR-compliant) output to support all standard multimode testing needs and dual wavelength 1310/1550 nm single-mode output for longer high-speed links
- Offers rugged, pocket-sized design
- Combines large display with an easy-to-use interface
- Offers maximum configuration flexibility with optional fixed or interchangeable optical connector adapters
- Provides auto-wavelength and TWINTest transmission modes
- Accommodates standard AA alkaline batteries
- Offers micro USB interface for AC power supply
- Each output ports supports two wavelengths
- Offers 3-year calibration period

Optical Loss Test Kits

The OMK-34 offers a dual-wavelength LAN optical test kit with a single-port dual wavelength multimode LED source (OLS-34) and a fixed SC connector output, a broadband power meter (Ge detector), and a universal push/pull 2.5 mm adapter (UPP) interface (OLP-34). The kit provides power, loss, and continuity testing on multimode LAN networks.

The OMK-34P offers a premium version of the OLP-34 that provides additional features such as interchangeable SC output adapters on the source and a micro-USB port on the power meter to enable AC charging and data storage downloads to a PC.

The OMK-36 combines multimode and single-mode test capabilities in one quad-wavelength optical test kit with a combination dual wavelength multimode LED and a dual wavelength single-mode laser in one unit (OLS-36). Both ports offer a fixed SC connector output. It also includes a broadband optical power meter (InGaAs detector) with a UPP 2.5 μm adapter interface (OLP-35) that provides excellent performance in power, loss, and continuity testing on both multimode and single-mode Enterprise Datacomm networks.

The OMK-36P offers a premium version of the OMK-36 that provides additional features such as interchangeable SC output adapters on the source and a micro-USB port on the power meter to enable AC charging and data storage downloads to a PC.

Features and Benefits

- Offers rugged, pocket-sized design
- Combines a large display with an easy-to-use interface
- Saves test time and provides error-free testing with the auto-wavelength and TWINtest features
- Provides permanent reference power level storage
- Accommodates standard AA alkaline batteries
- Offers a micro USB interface for AC power supply
- Offers a 3-year calibration period
Quad MM/SM OTDR Kits

The TB6K-DIS-QUAD-S OTDR Kit offers a compact, lightweight modular platform equipped with a Quad OTDR module designed for use in the installation and maintenance of Enterprise fiber networks that combines dual wavelength multimode and single-mode OTDR test functionality. This testing functionality supports in-building, intra- and inter-campus LAN applications.

The TB6K-DIS-QUAD-T serves as the touch-screen version of the QUAD-S kit.

Features and Benefits
- Provides a lightweight platform that weighs 2.4 kg/5.3 lbs
- Large 8.4-inch TFT color display improves viewing
- QUAD-T package features touch-screen display
- Provides extended battery life using smart Lithium ion cell
- USB connection supports fiber inspection probe and USB memory sticks for data storage; also supports mouse and keyboard which are optional accessories
- Provides internal memory
- Provides remote control via RJ45 Ethernet port
- Provides a comprehensive suite of PC software tools for post-processing of test results with FiberTrace (OFS-100) and FiberCable (OFS-200)
- Offers the following OTDR Dynamic Ranges:
  - Multimode 25/23 dB @ 850/1300 nm
  - Single-mode 40/38 dB @ 1310/1550 nm
- Offers the following OTDR Dead Zone performance:
  - Multimode 0.5 m EDZ; 2 m ADZ
  - Single-mode 0.8 m EDZ; 4 m ADZ

MM OTDR Kits

The TB6K-DIS-LAN-S Multimode OTDR kit offers a compact, lightweight modular OTDR equipped with a module for the installation and maintenance of LAN Enterprise multimode fiber networks. It provides dual wavelength Multimode OTDR testing to address LAN in-building and intra-/inter-campus multimode optical networks.

The TB6K-DIS-LAN-T kit is the touch-screen version of the LAN-S kit.

Features and Benefits
- Provides a lightweight platform that weighs 2.4 kg/5.3 lbs
- Large 8.4-inch TFT color display improves viewing
- LAN-T package features touch-screen display
- Provides extended battery life using smart Lithium ion cell
- USB connection supports fiber inspection probe and USB memory sticks for data storage; also supports mouse and keyboard which are optional accessories
- Provides internal memory
- Provides remote control via RJ45 Ethernet Port
- Provides a comprehensive suite of PC software tools for post-processing of test results with FiberTrace (OFS-100) and FiberCable (OFS-200)
- Offers dynamic ranges of 25/23 dB @ 850/1300 nm
- Offers Dead Zone performance at 0.5 m EDZ; 2 m ADZ
### Fiber Inspection Tools

<table>
<thead>
<tr>
<th>Feature</th>
<th>FBP Basic Kit w/ 1.8&quot; Display</th>
<th>FBP Basic Kit w/ 3.5&quot; Display</th>
<th>FBP Basic Kit w/ 1.8&quot; Display</th>
<th>FBP Basic Kit w/ 3.5&quot; Display</th>
<th>FBP Optimized Kit w/ 1.8&quot; Display</th>
<th>FBP Optimized Kit w/ 3.5&quot; Display</th>
<th>FBP Integrated Kit w/ 3.5&quot; Display</th>
<th>FBP Integrated Kit w/ 3.5&quot; Display</th>
<th>FBP Digital Analysis &amp; Test Kit w/ FiberChk2 software</th>
<th>FBP Digital Analysis &amp; Test Kit w/ FiberChk2 software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probe microscope and display for fiber end face inspection with 4 inspection tips/adaptors</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Includes dedicated patch cord inspection microscope</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Display size (in inches)</td>
<td>1.8</td>
<td>3.5</td>
<td>1.8</td>
<td>3.5</td>
<td>1.8</td>
<td>3.5</td>
<td>1.8</td>
<td>3.5</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Probe microscope with USB 2.0 connection and 4 inspection tips</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Connects to PC</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Measures optical power</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

### Fiber Field Test Solutions (Power Meters, Light Sources, and OTDRs)

<table>
<thead>
<tr>
<th>Feature</th>
<th>LPM Power Meter - OLP-34 (100m)</th>
<th>LED Source - OLS-34</th>
<th>Quad MM LED / SM Laser Source - OLP-34</th>
<th>Enterprise Basic Test Kit - OLP-34</th>
<th>Enterprise Quad MM/SM Test Kit - OLP-34</th>
<th>FBP Digital Analysis Kit - OLP-34</th>
<th>MM-OTDR 4 Kit - OLP-34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimode (50 µm)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Single-mode</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Universal push/pull adapter</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Fixed output adapters</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Field interchangeable adapters</td>
<td>O</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Data results storage</td>
<td>O</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Data download</td>
<td>O</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Battery operation</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>AC operation</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Fiber end face inspection capable</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Soft case</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Touch screen</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Auto-wavelength switching</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

O – Optional
☒ – Included in -T Kits only
Solutions for Active Network Testing in the Enterprise

**LanScaperPRO™ network tester**

The LanScaperPRO Cabling and Network Tester combines the functionality of a high-end cable tester and length measurement device with the capability of identifying, monitoring, and correcting LAN issues associated with the physical layer and link conditions in the network.

**Features and Benefits**

- Identifies and measures power delivered by IEEE 802.3af PoE and legacy Cisco inline power
- Detects and reports speed and capabilities for active Ethernet and other devices up to 1 Gbps
- Simultaneously pings three addresses to verify connectivity with network devices
- Blinks a link indicator to identify hub or switch port and links to Cisco bridge or router ports using Cisco Discovery Protocol
- Tests cabling configuration and verifies connectivity while conducting tests for opens, shorts, miswires, split pairs, and reverses
- Displays length measurement for each pair in feet or meters
- Generates selectable tones on selected pins for use with tone tracers

**Validator-NT™ Ethernet speed certifier**

The Validator-NT provides capabilities beyond those of the Validator offering a comprehensive set of features to test the active network’s capabilities.

**Features and Benefits**

- Certifies a network installation to meet Ethernet data transmission speeds up to 1000Base-T (1 Gbps) using BER tests
- Measures signal-to-noise ratio (SNR) and Skew to uncover impairments to Ethernet data transmission
- Ensures cable integrity by testing for opens, shorts, split pairs, miswires, and reversals and measures distance to opens and shorts—supports all network, telco, and coax cables
- Identifies cable termination on active Ethernet ports with hub flash
- Performs port discovery to detect advertised Ethernet speed and displays capabilities of network devices
- Pings network devices to verify connectivity to active equipment
- Creates network layout, documents cable tests, shows network topology, and records moves, adds, and changes with included Plan-Um software
ValidatorPRO-NT Ethernet speed certifier with integrated optical power meter WiFi and active network testing

The ValidatorPRO-NT extends the copper and fiber testing capabilities of the ValidatorPRO with a complete set of features to test wired or wireless active networks.

Features and Benefits

- Measures optical power on single-mode and multimode fiber used in testing fiber cable runs
- Certifies a network installation to meet Ethernet data transmission speeds up to 1000Base-T (1 Gbps) using BER tests
- Measures signal-to-noise ratio (SNR) and Skew to uncover impairments to Ethernet data transmission
- Ensures cable integrity by testing for opens, shorts, split pairs, miswires, and reversals and measures distance to opens and shorts—supports all network, telco, and coax cables
- Identifies cable termination on active Ethernet ports with hub flash
- Measures PoE voltage and current
- Detects advertised Ethernet speed and displays network capabilities with port discovery
- Discovers switch configurations with CDP and LLDP
- Pings network devices to verify connectivity to active equipment
- Discovers and displays essential information regarding functionality of 802.11 b/g/n wireless devices
- Creates network layout, documents cable tests, shows network topology, and records moves, adds, and changes with included Plan-Um software

SmartClass™ Ethernet Complete Package (CSC-ETHTR-P3)

The SmartClass Ethernet product provides an easy-to-use, cost-effective Ethernet testing solution for basic physical layer cable testing, Layer 2 and Layer 3 traffic generation, and full RFC2544 testing.

Features and Benefits

- Serves as a full traffic generation tester
- Provides Layer 2 and Layer 3 traffic generation
- Verifies Layer 3 ping and traceroute connectivity
- Provides RFC2544 throughput verification and circuit qualification
- Offers Loopback and Traffic Generation modes
- Enables installation of point-to-point and point-to-multipoint Ethernet services
- Provides cable diagnostics to find electrical cable faults
- Provides optical power measurements to check laser levels
- Loops back and filters incoming traffic at IP or Ethernet layer
- Provides link statistics and results to measure incoming frames and link status
Enterprise Services Application Module with T-BERD 4000 Base

The Enterprise Services Application Module (ESAM) with T-BERD 4000 base (TB4-DIS-ESAM) provides an expandable, scalable combination test solution for comprehensive Enterprise testing. It ensures that copper cables can support gigabit Ethernet (GigE), tests network connectivity (from Ethernet interface discovery to Layer 4 Port connectivity), discovers network devices both on and off the subnet, collects statistics and analyzes network utilization/traffic patterns, and performs wirespeed capture on GigE links.

Features and Benefits
- Isolates and resolves Ethernet or IP problems using wirespeed packet capture and expert analysis using unique, in-depth JDSU J-Mentor capture and industry-standard onboard Wireshark
- Monitors throughput and utilization with wirespeed deep packet link statistics and analysis
- Verifies functionality of devices and services with a full suite of network connectivity tests
- Identifies and audits network devices with network discovery
- Tests copper and fiber physical media
- Provides field technician-oriented workflow-based user interface
- Offers a scalable, modular solution with optional:
  - VoIP phone emulation including Mean Opinion Scoring
  - Optical power meter/visual fault locator
  - Fiber inspection probe with automated pass/fail
  - WiFi testing
  - OTDR modules

Active Network Testers

<table>
<thead>
<tr>
<th>Copper wiremap</th>
<th>Trace using passive IDs</th>
<th>Measures length</th>
<th>Toning (sends tone)</th>
<th>Distance to opens</th>
<th>Distance to shorts</th>
<th>Certify transmission speeds to 1000Base-T on copper cables</th>
<th>Measure PoE</th>
<th>Hub flash</th>
<th>Interface (port) discovery</th>
<th>Ping</th>
<th>Layer 2 discovery</th>
<th>Traceroute</th>
<th>Layer 4 connectivity</th>
<th>Network element discovery</th>
<th>Utilization statistics</th>
<th>Show protocol distribution</th>
<th>Identify top talkers</th>
<th>Capture (PCAP)</th>
<th>Wireshark</th>
<th>J-Mentor expert analysis</th>
<th>RFC2544</th>
<th>Probe microscope and display for fiber end face inspection</th>
<th>Report generation</th>
<th>Measures optical power</th>
<th>Visual fault locator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Test & Measurement Regional Sales

NORTH AMERICA
TEL: 1 866 228 3762
FAX: +1 301 353 9216

LATIN AMERICA
TEL: +1 954 688 5660
FAX: +1 954 345 4668

ASIA PACIFIC
TEL: +852 2892 0990
FAX: +852 2892 0770

EMEA
TEL: +49 7121 86 2222
FAX: +49 7121 86 1222

WEBSITE: www.jdsu.com/test