MTS-8000 Portable Optical Network Tester
All your optical network testing needs covered in a single platform

The power of one, performing the work of many

A powerful unit
- Flexible scalable platform
- Industry-leading size and weight, e.g. platform + transport module < 7 kg
- Interchangeable modules
- Generates test results in seconds
- Fully automatic testing
- Combination of several tests
- Remotely controlled (via Ethernet, Fiber)

Fiber Characterization Testing
- Optical Time Domain Reflectometer (OTDR)
- Chromatic Dispersion (CD)
- Polarization Mode Dispersion (PMD)
- Attenuation Profile (AP)
- Loss testing

Transport Module
- All in one module for
  - Full PDH/T-Carrier & SDH/SONET testing up to 10 Gb/s
  - Ethernet testing 10/100/1GigE/10GigE LAN & WAN up to the IP layer

Dispersion Modules
- PMD – Polarization Mode Dispersion
- CD – Chromatic Dispersion

CWDM/DWDM Testing
- OSA with frequency range from 1250 nm to 1650 nm
- DWDM parameters OSNR, optical channel power, wavelength deviation
- Application for EDFA and DFB testing
- Channel isolation for BER analysis
- Single or dual port analyzer

Pass/Fail OTDR analysis

Amplified DWDM system analysis
Fiber Characterization

Automatic bi-directional measurement function
- Automate the acquisition process
- Check fiber continuity
- File transfer through the fiber
- True splice loss with both end analysis
- Optical talkset option needed

Built-in Optical Talkset
- Data transfer capability: file exchange or remote control
- Used also for fully automatic bi-directional measurements
- OTS-55 handheld for far end communication

Physical Fiber Testing
Key features OTDR
- Fast data acquisition enables VHD plug-in to reach 40 dB after 10 s with a maximum performance up to 45 dB
- Highest dynamic range with 50 dB at 1550 nm, UHD module
- New VLR module with outstanding dead zone of 0.8 m EDZ and 4 m ADZ, 43 dB dynamic
- Fastest scan speed at 0.1 s in real-time mode
- Up to 128000 acquisition points with sampling resolution down to 4 cm

CD Module
- Pulse delay method complies with TIA/EIA FOTP-168
- Fast single-end measurement with sectional analysis capability
- CD analyzer and four-wavelength OTDR (1310/1480/1550/1625 nm) with one module

PMD Module
- Fixed analyzer method standardized by ITU-T, IEC and TIA/EIA
- Fast measurement time – from just 6 seconds
- Measure through multiple EDFAs

OFS-100 Results Analysis
- OTDR, CD, PMD, AP, and OSA results analysis
- Batch processing capability via automation process
- Pass/Fail function
- Customized printouts

OFS-200 FiberCable Acceptance Report Generation
- Complete fiber characterization reporting capability including bi-directional OTDR, CD, PMD, AP, IL and ORL results
- Advanced OTDR evaluation for loop back and mid-point management
- Powerful report preview
- Direct access keys for easy process and efficiency
Transport Configuration

Primary Port Bank
- 2.5 Gb/s, 622 Mb/s, and 155 Mb/s SDH/SONET Tx/RX (1310 nm, 1550 nm)
- 10/100/1000 Mb/s Ethernet
- 1 GigE Tx/Rx (850 nm, 1310 nm, 1550 nm)

Secondary Port Bank
- 10/100/1000 Mb/s Ethernet
- 1 GigE Tx/Rx (850 nm, 1310 nm, 1550 nm)

10 Gb/s Port Bank
- 10 Gb/s SDH/SONET (1310 nm, 1550 nm)
- 10 GigE LAN & WAN (850 nm, 1310 nm, 1550 nm)

Optical Connection Check Interfaces
- High accuracy power meter
- Continuous wave power source
- Visual fault locator

Port Bank #4
- T1 and E1 balanced and unbalanced Tx/Rx

Port Bank #5
- E3, DS3, STS-1, E4 Tx/Rx
- STM-1 (e) Tx/Rx

Transport Module
- Contained in one 5 cm module
  - PDH / T-carrier interfaces include DS1, E1, E3, DS3, E4, STS-1 and STM-1e
  - SDH/SONET interfaces (1310 nm, 1550 nm) include 155 Mb/s, 622 Mb/s, 2.5 Gb/s, 10 Gb/s
  - Ethernet interfaces (850 nm, 1310 nm and 1550 nm) include 10/100/1000 Mb/s electrical and 1 GigE Optical
- 10 GigE LAN + WAN
- Only 2.5 kg fully populated, total weight < 7 kg
- Fully scalable to meet your current and future needs
- Optical and electrical signal level measurements
- Up to 2.5 hours at 10 Gb/s rates with one battery (2 batteries possible)
- Field exchangeable connectors for all standard connector types

• SDH/SONET testing
  - Mixed payload generation and analysis
  - Concatenated signals
  - Automatic Protection Switching (APS)
  - Overhead byte manipulation and analysis
  - Round Trip Delay (RTD)

• Ethernet testing
  - Single and dual port Ethernet configuration
  - Testing on Layer 1, 2 and 3 (IP)
  - VLAN support
  - Constant, burst and ramp traffic generation
  - Traffic filter capabilities
  - Automated RFC2544 testing
  - Loop-up /loop-down of far end device
**Connector Inspection Scope**
- Fiber Connector Inspection Connectors
- Patch panel inspection
- 250 or 400 magnification
- Uses MTS-8000 large screen (10.4”)
- Comparison with 3 other images on the same screen

**Insertion Loss Measurements**
- Power meter integrated in MTS-8000 mainframe
- Multi-wavelength laser source with CW or modulated signals
- Easy loss measurements of a jumper or patch cord

**Built-in 635 nm Visual Fault Locator**
- Universal push/pull for all 2.5/1.25 mm connector types

**Accessories**
- E80HCase5: Hard carrying case for single module configuration
- E80SCase3: Soft carrying case for single module platform
- E80keyB: USB keyboard

**EFSCOPE250, EFSCOPE400: Optical video inspection probe**

**Alternative**
OVF-1 ball pen-sized separate visual fault locator

**OTS-55 SMART Optical Talkset**
- ≥ 45 dB dynamic range
- Wavelength of operation: 1550 nm

**Test & Measurement Regional Sales**

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