

T-BERD®/MTS-5800

Handheld Network Test Product Family



Benefits

- All-in-one handheld tool simplifies multitechnology testing
- Optimized for easy field use with multi-touch screen, scripted workflows, and support for emerging network technologies
- Guarantees maximum efficiency and success in evolving carrier Ethernet and mobile backhaul networks
- TrueSAM™ and advanced IP test tools follow best practices with repeatable methods and procedures for faster service activation and troubleshooting tests with easy-to-understand results

Applications

- Tests and troubleshoots converged Ethernet/IP networks at 10 Mbps to 10 G interfaces
 - Tests Layer 1-3 Ethernet/IP SLAs with an automated, enhanced RFC 2544/SAMComplete per ITU-T.Y.1564
 - Integrated burst testing approach including CBS verifies buffer settings and TrueSpeed per RFC 6349 for performance testing so you can experience your network the way your customers do
 - Robust network discovery, top talker analysis, deep packet capture, packet analysis, and expert troubleshooting guidance capabilities
- Tests TDM/PDH to SONET/SDH at OC-3/STM-1 to OC-192/STM-64, including service disruption measurements and path overhead (POH) capture with triggers
- Enables installation and maintenance of OTN networks up to 11.1 Gbps interface with ODU-0 and Flex support for Ethernet/IP client interfaces
- Supports 8 G FC dual-port interfaces (along with 1/2/4/10 Gbps) for installation and maintenance of SANs and low-latency circuits
- Verifies network synchronization
 - Emulates a 1588v2 master clock/slave recovery for proper point-to-point (PTP) message propagation and packet-delay variation (PDV) verification
 - Verifies SyncE frequency synchronization accuracy and Ethernet synchronization message channel (ESMC) message propagation
 - Measures wander on SyncE, 1PPS, T1, E1, and 2 and 10 MHz signals
- Tests remote radio head (RRH) health with CPRI and OBSAI FTTA tests
- Supports SFP+ pluggable optics
- Two simple T-BERD/MTS-5800 configurations:
 - Single- and dual-port versions
 - Fully loaded TDM/PDH to dual 10 G Ethernet, SONET, SDH, Fibre Channel, and OTN support

The T-BERD/MTS-5800 Handheld Network Tester addresses the challenges of carrier Ethernet evolution. It supports both legacy and emerging technologies required to handle various network applications including metro/core, mobile backhaul, and business services installations.

The industry's smallest handheld instrument can test throughout the service life cycle, including fiber characterization, service activation, troubleshooting, and maintenance. Advanced Ethernet test functionality, such as J-Profiler, wirespeed capture/decode, and automated J-Mentor, guides field technicians through troubleshooting without using a separate analyzer instrument.

The T-BERD/MTS-5800 ensures successful mobile backhaul transitions by validating both Ethernet backhaul synchronization (1588v2 and SyncE) and front haul (CPRI/OBSAI) BER and delay to guarantee successful mobile handoff between cell sites, thereby avoiding service degradation.

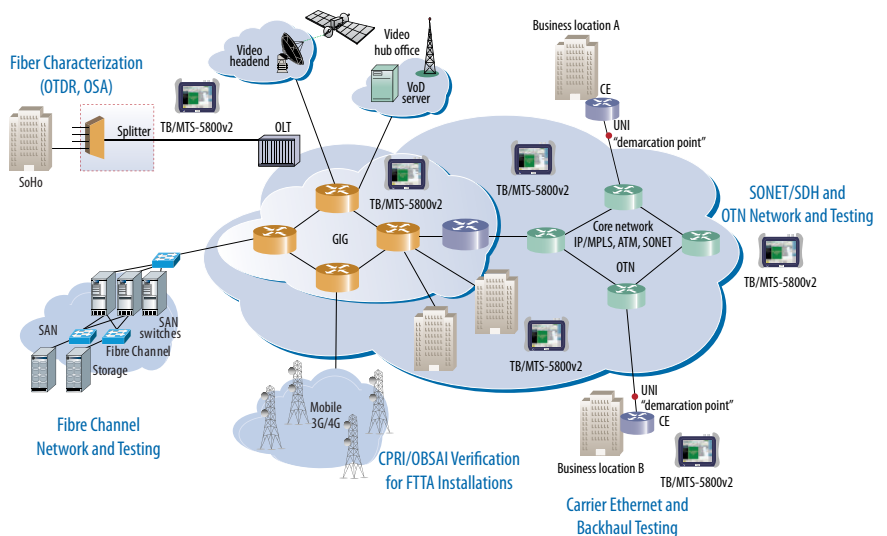
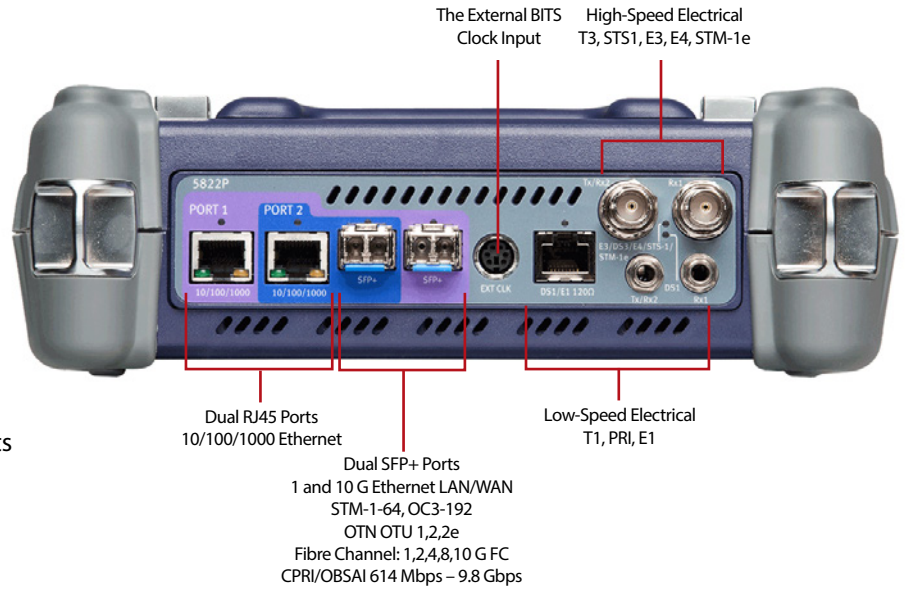


Figure 1. Carrier Ethernet network

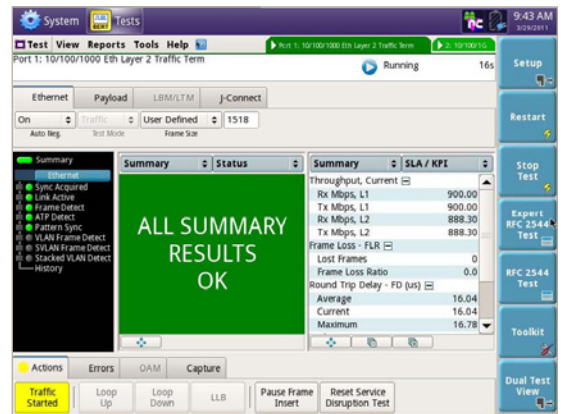
All-in-One Handheld Tool

- Industry's smallest dual 10 G handheld instrument for Ethernet, SONET, SDH, OTN, Fibre Channel, and CPRI/OBSAI testing
 - All test interfaces readily available
 - Large screen (7 inches) to display test information
 - Multi-touch screen for easier navigation and advanced workflows
 - Configure to best meet your needs
- State-of-the-art platform supports:
 - Integrated Bluetooth to easily offload results
 - Integrated WiFi for test set connectivity
 - Store 1000s of reports
 - FiberScope connectivity

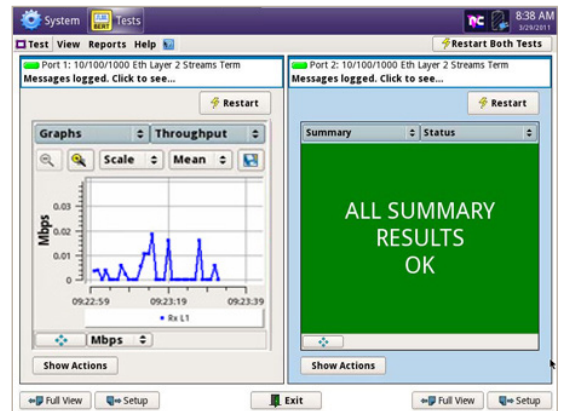


Optimized for Easy Field Use

- Fixed test interfaces eliminate loose pluggable modules
- LEDs indicate plug-ins for tests
- Streamlined user interface with simple pass/fail, green/red results
- Extended battery life for longer test times
- Rapid boot-up from power-on to test start
- Dual-port operation to run two tests simultaneously, including 10 G/high-speed tests



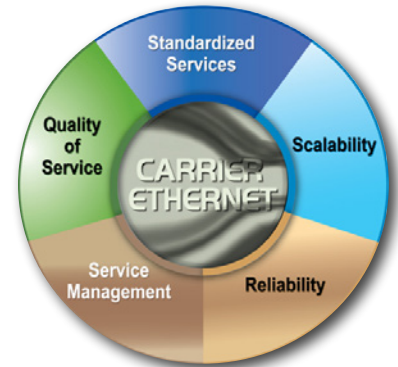
All key results in one view



Two tests: One streamlined view

Enables Network Evolution – Today and Tomorrow

- Guarantees leading-edge carrier-grade Ethernet requirements:
 - Ensures **reliability** with link and service OAM (IEEE 802.3ah, 802.1ag, and ITU-T Y.1731)
 - Validates **network scalability** with VLAN, Q-in-Q, MPLS/VPLS tunnelling technologies
 - Certifies **network synchronization** with synchronous Ethernet and IEEE 1588v2
- **PTN Ready:** Supports **packet transport network (PTN)** evolution with MPLS-TP technology
- Architected to meet future technology needs

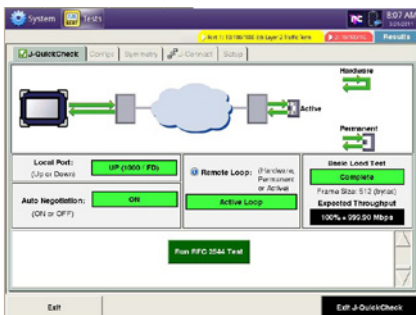
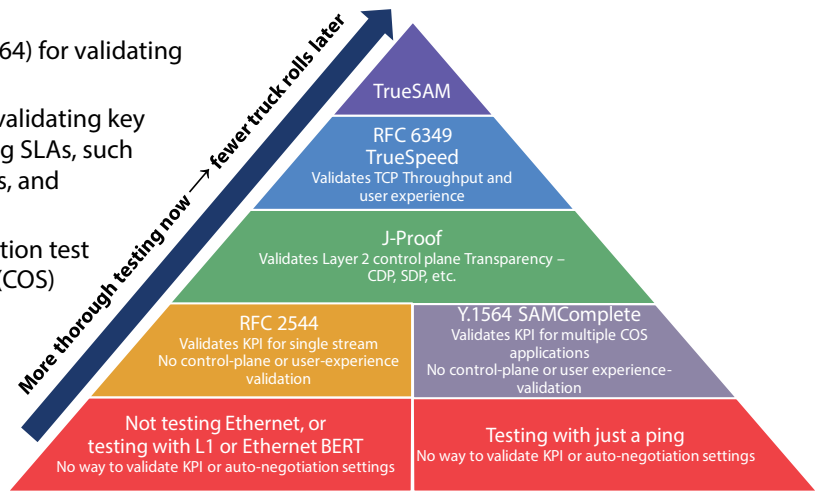


Carrier Ethernet graphic courtesy of the Metro Ethernet Forum (MEF), of which JDSU is a member.

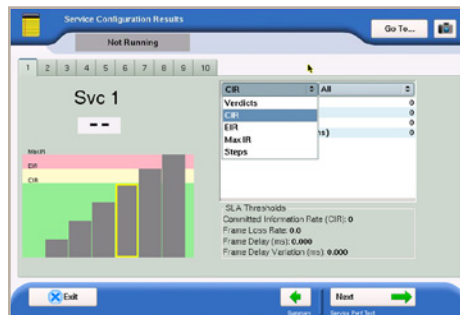
Save Valuable Service Activation Time

Test better and quicker with automated tests

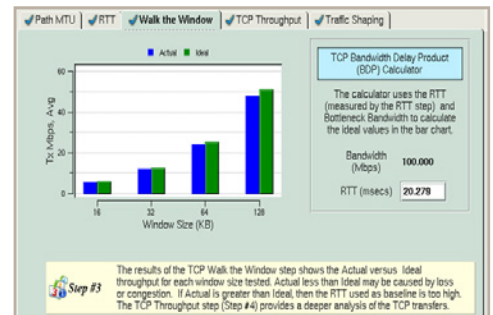
- J-QuickCheck is a fast, automated test (RFC 2544, Y.1564) for validating end-to-end and auto-negotiation configuration
- Enhanced RFC 2544 is an automated turn-up test for validating key performance indicators (KPIs)/ concurrently measuring SLAs, such as throughput, frame delay, delay variation, frame loss, and optionally committed burst size (CBS)
- Y.1564 SAMComplete is an automated service verification test speeds the installation of multiple classes of services (COS)
- TrueSpeed per RFC 6349 is an automated, standards-based test that can save nearly a quarter in operating expenses (OpEx) and reveals the reason for slow file downloads, eliminating finger-pointing
- TrueSAM combines all of these tests into one ultimate installation tool



Enhanced RFC 2544 with J-QuickCheck



SAMComplete per ITU-T.Y.1564

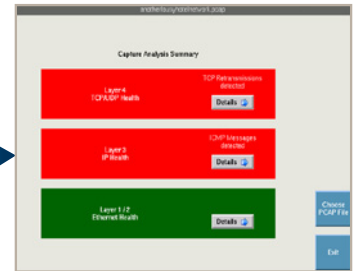
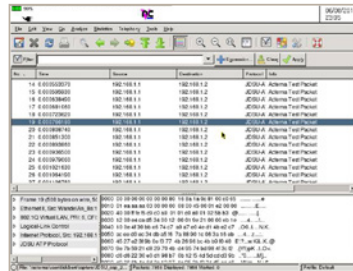


TrueSpeed per RFC 6349

Reduce Mean Time to Repair for Network Problems

Immediately identify problems with automated tests without the need for a separate analyzer

- Network Discovery automatically identifies equipment present on the network
- J-Profiler discovers live traffic streams for real-time troubleshooting with in-service top-talkers analysis
- Integrated Capture/Decode offers 10 G line-rate packet capture and analysis in a handheld test tool
- J-Mentor provides expert troubleshooting guidance and interprets packet decodes
- Reduce CapEx/OpEx and still identify problems immediately without the need for a field expert or a separate analyzer



J-Mentor — Provides expert troubleshooting guidance

Part of the Leading T-BERD/MTS Test Portfolio

Activate services more quickly and accurately

Reduce mean time to repair (MTTR) on network problems

Test the widest range of traditional and emerging telecom interfaces



Common Application Base

Same user interface + same results + same methods and procedures

StrataSync

Empower Your Assets

StrataSync is a hosted, cloud-enabled solution for managing assets, configurations, and test-data on JDSU instruments. It also ensures that all instrument software is current and the latest options are installed. StrataSync lets you manage inventory, test results, and performance data anywhere with browser-based ease while it also improves technician and instrument efficiency. StrataSync manages and tracks test instruments, collects and analyzes results from the entire network, and it informs and trains the workforce.



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