T-BERD®/MTS-6000A MSAM

The industry's most complete multitechnology service activation and troubleshooting test tool

The T-BERD/MTS-6000A Multi-Service Application Module (MSAM), the industry's most complete multitechnology service activation and troubleshooting test tool, continues to dominate the installation and troubleshooting market with its evolutionary hardware design that addresses the challenges of converged IP networks with ever-growing 10 G core and access networks. It also aids in service activation and troubleshooting of storage area networks (SANs), including 8 G Fibre Channel (FC), to enable data center redundancies, low-latency trading, and backup processing. Its network synchronization and timing testing capabilities and its support for CPRI/OBSAI are perfectly suited for mobile fronthaul and backhaul testing for LTE, small-cell, and macrocell rollouts.

Key Benefits

- Seamlessly expands into future technologies and interfaces
- Leads the industry in network field installation, advanced troubleshooting, and lab-based network validation
- Guarantees end-customer satisfaction with deep application-layer testing for data, voice, and video
- Speeds service activation and troubleshooting with TrueSAM™ and J-Complete™
- Modular and field upgradeable

This flagship T-BERD/MTS platform continues to focus on the entire service life cycle including installation, troubleshooting, and maintenance. T-BERD/MTS-6000A MSAM is the leading multiport 10 G product designed for field and central office (CO) technicians who must verify transport technologies from time-division multiplexing/plesiosynchronous digital hierarchy (TDM/PDH) up to 10 G optical transport networks (OTN), from 10 Mbps to 10 G including 8 G FC, and who must assure end-customer service level agreements (SLAs).

Features

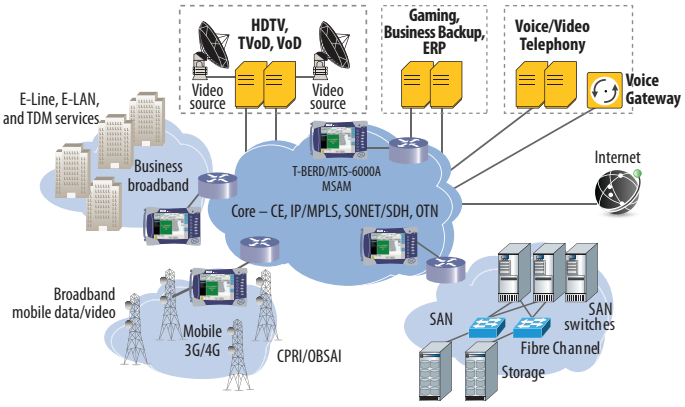
- Tests and troubleshoots converged Ethernet/IP networks with 10 Mbps to 10 G interfaces
  - Tests Layer 1-3 Ethernet/IP SLAs with an automated, enhanced RFC 2544/SAMComplete per ITU-T Y.1564
  - Verifies buffer settings with burst testing (including CBS)
  - Shows TCP throughput with TrueSpeed™ per RFC 6349
  - Troubleshoots comprehensively with network discovery, top talker analysis, deep packet capture, packet analysis, and expert guidance
- Tests TDM/PDH from DS1/E1 to OC-192/STM-64, including service disruption measurements and path overhead (POH) capture with triggers
- Helps install and maintain OTN networks (up to 11.1 G interfaces) with ODU-0/ODUFlex support for Ethernet/IP client interfaces
- Tests dual FC (1, 2, 4, 8, 10 G) for service activation 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 verification of packet-delay variation (PDV)
  - Verifies SyncE frequency synchronization accuracy and Ethernet synchronization message channel (ESMC) message propagation
  - Measures wander for 1 pps and SyncE
- Supports SFP and XFP pluggable optics, including 50 GHz C-band tunable XFPs

Maximizes ROI

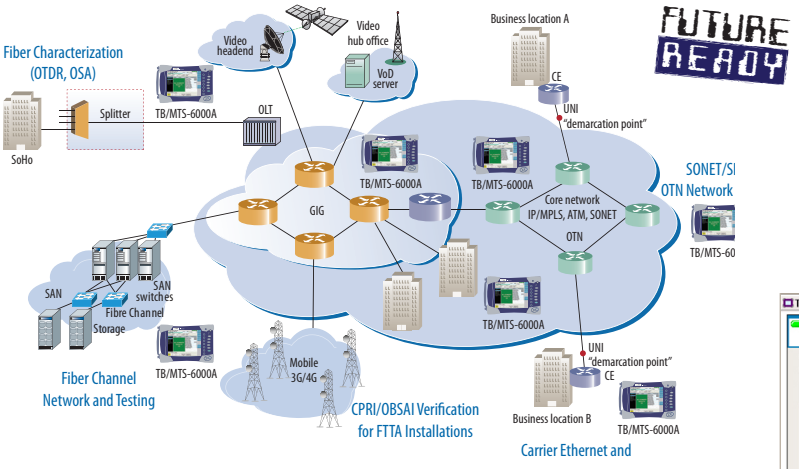
The modular, field-upgradeable JDSU tester maximizes ROI with coverage for every testing need (DS1 to 10 G) and seamless expansion for future technologies and interfaces.

Industry-Leading Multiport 10 G Modular Platform

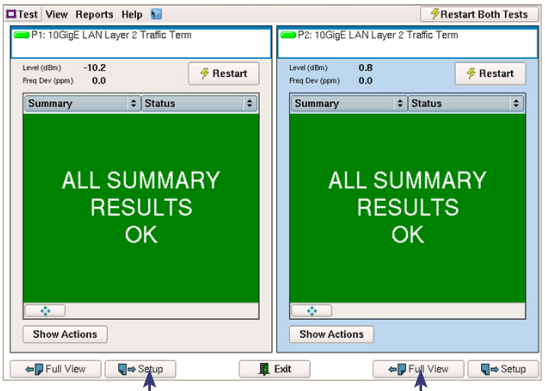
- Twice the testing power cuts test time in half
- Enables installing primary and secondary 10 G circuits simultaneously
- First modular, portable platform to support in-line 10 G through mode capture and decode in both directions
- First dual-port 8 G FC field test set that combines all other transport technologies into a single module



Converged IP network with SAN extensions

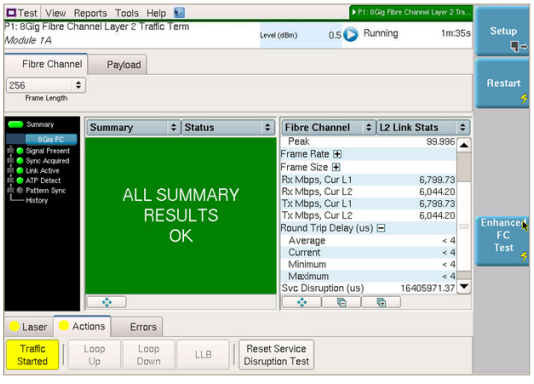


The T-BERD/MTS-6000A platform covers all testing needs



Dual 10 G window

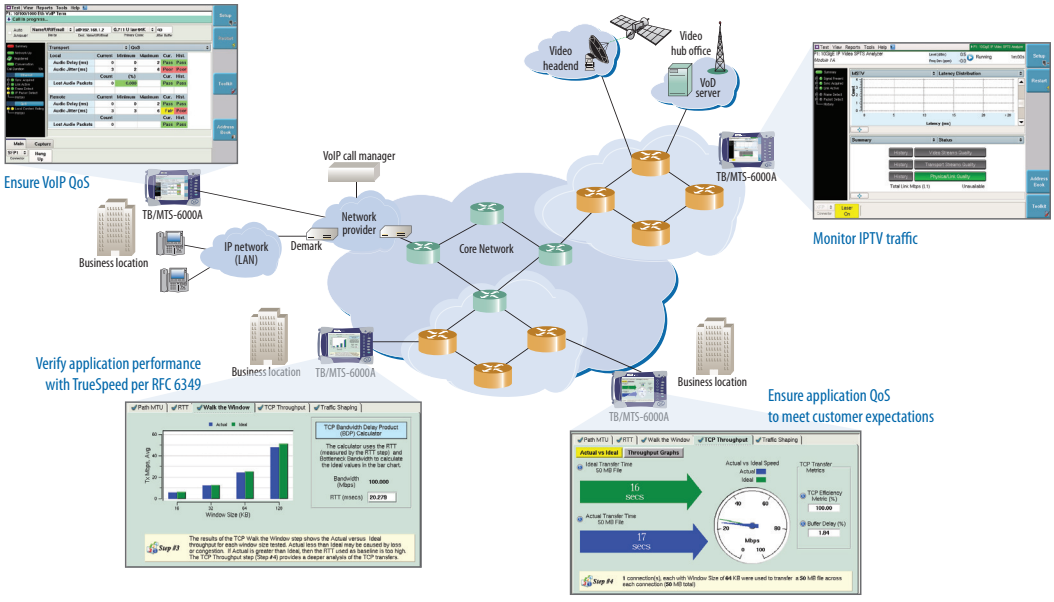
T-BERD/MTS-6000A with MSAM



8 G FC window

Experience Your Network Like Your Customers Do

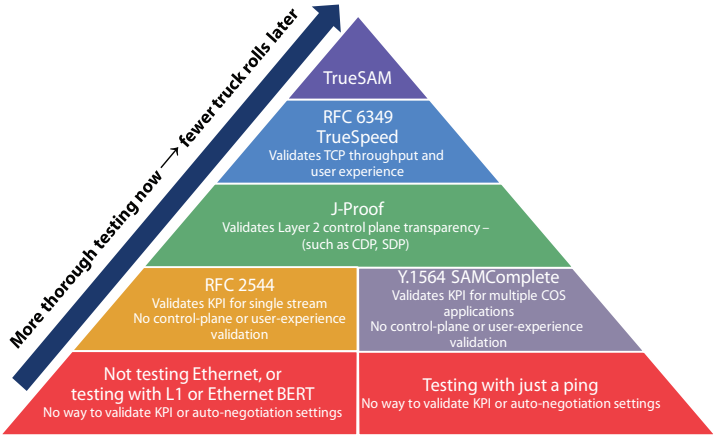
- Guarantee end-customer satisfaction with application-layer testing (VoIP, video, and data)
- Improve customer retention with true service testing
- Reduce truck rolls by installing the service correctly the first time
- TrueSpeed per RFC 6349 — Automated, standards-based test saves 20% or more in operating expenses (OpEx) by eliminating the finger-pointing associated with poor customer quality of experience (QoE)
- TrueSAM — Combines the configuration and execution of these tests into one installation tool

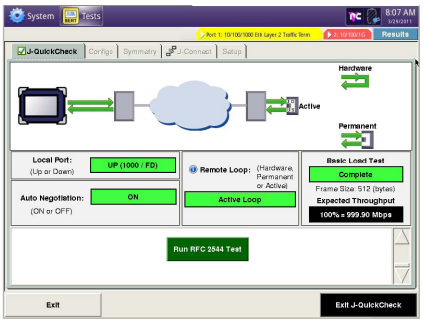


Save Valuable Time with Service Activation Tests

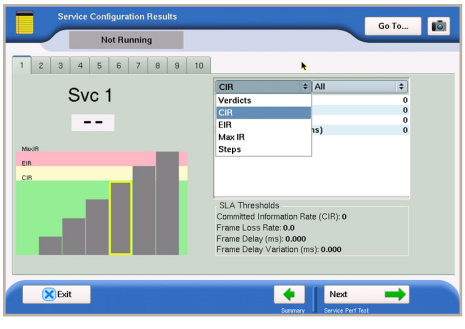
Test faster and more reliably with automated tests

- J-QuickCheck — Quick pre-automated test (RFC 2544, Y.1564) validates end-to-end and auto-negotiation configuration
- Enhanced RFC 2544 — Automated turn-up test validates key performance indicators (KPIs)/measures SLAs concurrently—throughput, frame delay, and delay variation, frame loss, and (optionally) committed burst size (CBS)
- Y.1564 SAMComplete — Automated service verification test speeds installation of multiple classes of services (CoS)

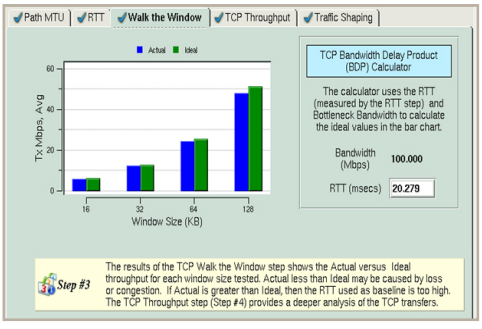




Enhanced RFC 2544 with J-QuickCheck



SAMComplete per ITU-T Y.1564

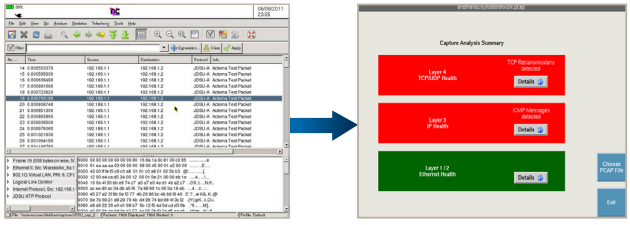


TrueSpeed per RFC 6349

Reduce Mean Time to Repair for Network Problems

Automated tests in one analyzer immediately identifies problems

- Network Discovery — Automatically identifies equipment present on the network
- J-Profiler™ — In-service top-talker analysis tool discovers live traffic streams
- Integrated Capture/Decode — Provides multiport, handheld 10 G line-rate packet capture and analysis
- J-Mentor — Delivers expert troubleshooting guidance interpreting packet decodes
- Reduces CapEx/OpEx — Eliminates the need for a separate analyzer or a field expert



J-Mentor — Provides expert troubleshooting guidance

Unleash the Power of Your Wireless Network

Advanced Fronthaul Testing

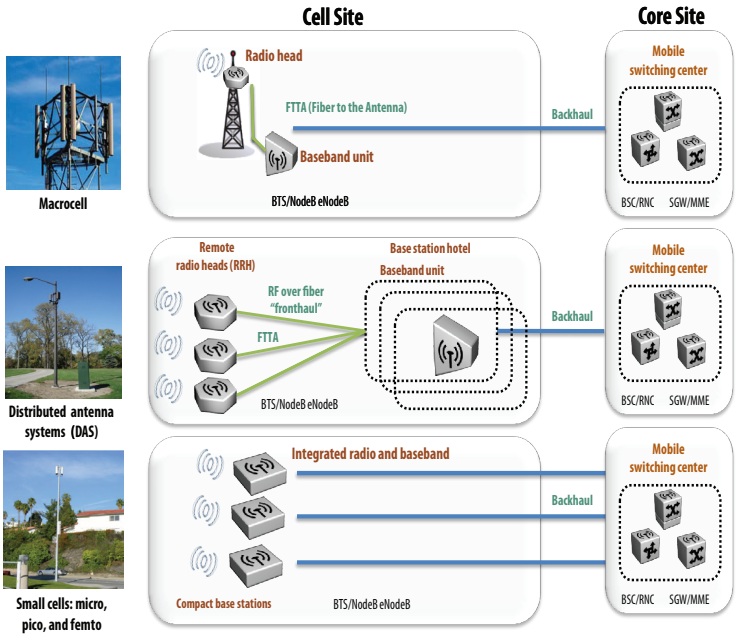
- Verify the fronthaul CPRI or OBSAI network is error free with low latency from 614.4 Mbps to 9830.4 Mbps with pattern BERT
- Remotely test CPRI or OBSAI radio head activity without having to climb a pole or travel to a small cell site
- Expedite CPRI/OBSAI troubleshooting with Layer 2 alarm and line-code violation detection

Reduce Dropped Calls with Timing and Synchronization Testing

- Basic timing tests let any technician check 1588v2 (PTP) connectivity and/or SyncE frequency and ESMC messages
- Advance timing features let experts measure wander on SyncE, T1/E1, 1PPS, and 2/10 Mhz timing references per O.17x standards

Comprehensive Ethernet Backhaul Support

- Automated service activation and troubleshooting test suites prove high quality of customer experience and resolve problems faster



Contact Us **+1 844 GO VIAVI**
(+1 844 468 4284)

To reach the Viavi office nearest you, visit viavisolutions.com/contacts.

msamv2-pb-tfs-tm-ae
30173002 903 1113