Triple–Play Test Solutions for HFC Networks

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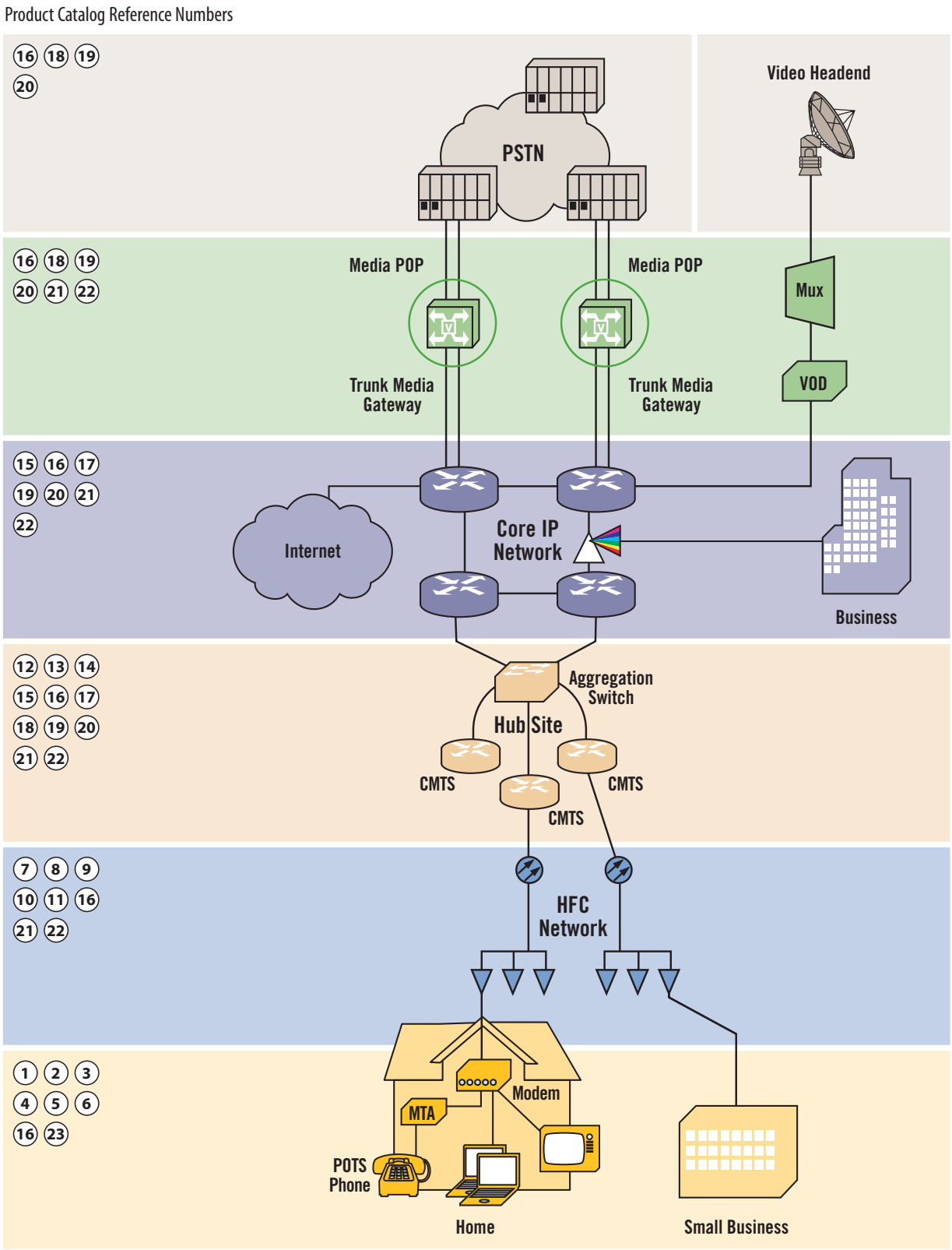
Catalog of Products to Certify and Scale
Voice, Video, and Data Services over Cable

JDSU

JDSU Test Solutions for Certifying and Scaling Triple-Play Networks



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Introduction

The world's largest network operators and equipment manufacturers have long trusted Wavetek and JDSU test and measurement products and solutions. Now, JDSU offers the same comprehensive portfolio of instruments, software, systems, and services, with the same market leading positions.

The JDSU portfolio is designed to help operators scale triple-play service offerings reliably, retain customers through the transition, and improve workforce efficiency during, through, and following service roll-out. It features integrated instruments, systems, and software which work seamlessly across RF, metro Ethernet/IP, data, and optical domains to rapidly detect and segment VoIP and digital video service impairments without the need for a truck roll. JDSU products are very rugged and deliver the precise measurements required by the industry's top engineers and field technicians. Application-specific solutions from JDSU perform the right tests at the right place at the right time by covering each stage of network development and all of the phases of triple-play service rollout.

JDSU products enable proactive maintenance and help ensure that installations work right the first time. The built-in automation allows more complex tests to be conducted in shorter timeframes without errors. With JDSU, operators can maintain profitability and establish a competitive advantage. From network installation and turn-up to service provisioning, troubleshooting, and maintenance, JDSU instruments, systems, and software help operators and technicians quickly rollout VoIP, HDTV, and high speed data services over converged networks. JDSU also maximizes HFC return path performance and systematically provides home and network certification reports.

This catalog provides an overview of JDSU test and measurement products, solutions, and services specifically designed for CATV system operators. Each product is aligned with operators' business objectives and incorporates solution-based functions and usability features that enhance the end users' testing proficiency, accuracy, and speed. JDSU solutions cover customer premises installation testing, HFC plant maintenance, and HFC monitoring as well as digital video, optical and metro-ethernet, and IP testing. For a complete list of offerings, visit www.jdsu.com/test or contact your dedicated sales representative.

Customer Premises Testing

Analog and Digital Voice, Video, and Data Signal Level Meters • Leakage Meters • Whole Home Wiring

1

DSAM Digital Service Activation Meters
Handheld Triple-Play Field Meters

Wavetek™ Series Field Meter

The DSAM family of meters is scaled to provide just the right collection of test tools needed for installers, service technicians, and network maintenance technicians to perform their jobs efficiently. The DSAM incorporates state-of-the-art DSP and DOCSIS® technologies to test cable modem services, digital video, analog video, and PacketCable™ VoIP. A wide range of DSAM configurations is available to meet individual requirements.

- DSAM - 1500 – provides the installation technician with a basic Signal Level Meter (SLM) that has both analog and digital capabilities.
- DSAM - 2500 / 2600 provide the next level of capability by adding DOCSIS troubleshooting and provisioning. The DSAM-2600 also offers QAM Ingress and BER for Deep Interleave (128,4).
- DSAM - 3500 / 3600 adds Ethernet testing, full downstream spectrum mode, and a constellation view of QAM carriers. The DSAM-3600 also offers QAM Ingress and BER for Deep Interleave (128,4).
- DSAM - 6000 includes all the aforementioned DSAM functionality and adds both forward and reverse Stealth Sweep™ performance testing capability.

Highlights

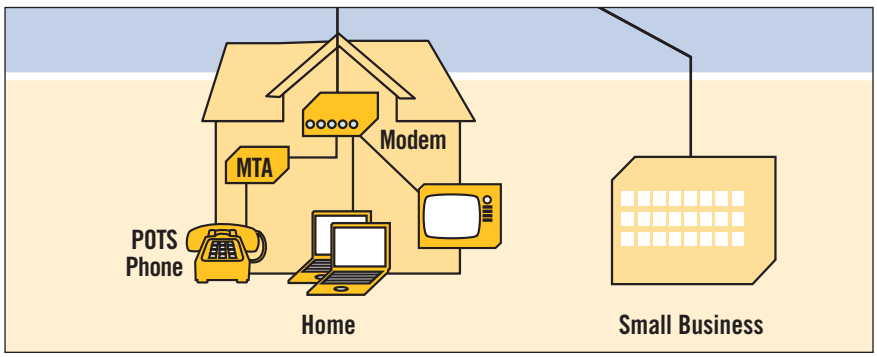
- All-in-one meter includes DOCSIS®/EuroDOCSIS® service testing and SLM features
- Autotest capability with administration security
- Rugged, lightweight design withstands rain, cold, heat, bumps, drops, and other accidental mishapss
- Extensive help system directly linked to meter capabilities
- Multiple language support
- Analog and digital signal level capabilities including mini-scan, tilt, full-scan, and constellation
- Home Certification Option

Applications

- Upstream and downstream verification with CMTS using DOCSIS/EuroDOCSIS protocols; includes DOCSIS/RF IP throughput and packet loss performance testing. VoIP test options
- Digital carrier performance with Quick QAM summary of MER/EVM and pre/post FEC BER
- Isolate PC configuration issues with Web Access Test through the customer's cable modem; optional Ethernet IP throughput and packet loss performance testing
- Pre-configured automated tests for digital, analog, and DOCSIS channels
- Increase field efficiency with an optional browser interface, over the DOCSIS RF link to your workforce management system using TechComplete™ Test Productivity Pack (TPP) software
- FEC BER, ES, and SES measurements are made on deep interleave 256 QAM carriers using the DSAM-2600, 3600, and 6000 models

Key Features

- Digital Quality Index (DQI) provides faster, more advanced Digital Quality Measurements
- TechComplete™ Test Productivity Pack (TPP) software
- Secure Sync™
- DOCSIS, versions 1.0, 1.1, and 2.0 based; optional PacketCable™ VoIP test capability
- 4 to 1000 MHz range; 8 MHz and 6 MHz models
- Errored Seconds and Severely Errored Seconds
- QAM Ingress, Hum Analysis, and Return Alignment
- VoIP Check
- Extensive In-meter Help and multiple language support
- Optimal PC software platform to manage test activities, maintain accurate inventory, and baseline technician/contractor performance
- PathTrak™ Field View (optional)



See Feature Matrix on page 11 for more specific details.

Customer Premises Testing

Analog and Digital Voice, Video, and Data Signal Level Meters • Leakage Meters • Whole Home Wiring

2

CLI-1450 and CLI-1750 Cable Leakage Meters

LST-1700 Home Wiring Test System

Combination leakage and signal level meters

The CLI meter series gives cable network technicians all of the high-performance, time-saving measurement tools necessary to successfully complete frequency agile leakage detection and measurements.

JDSU has embraced the "Find and Fix" concept in the design of the CLI-1450/CLI-1750 Combination Signal Level and Leakage meter. All the same reliable signal level meter functions found in the MicroStealth are included in the CLI products, eliminating the need to carry multiple products.

Highlights

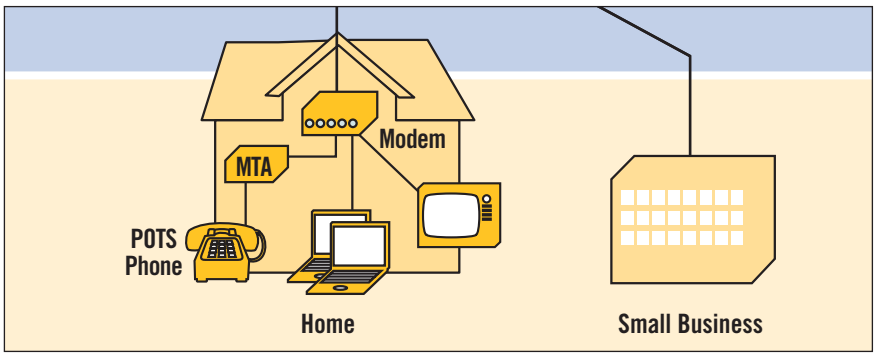
- CLI-1450 and CLI-1750 provide a standard frequency range of 5 to 890 MHz
- Complete solution for installers eliminating the need for multiple meters or testers
- Combination signal level meter, leakage meter, and home wiring tester
- Leakage and advanced signal level measurements provide a compact "one box" solution
- Frequency agile "Find and Fix" leakage detection accurately pinpoints RF egress; leakage tagging differentiates competing signals in overbuilt network areas
- Complete digital test solution for DTV and forward cable modem signals with digiCheck(TM) measurement
- Intuitive user interface available in multiple languages
- Extended-life nickel metal hydride (NiMH) battery system supplies a quick charge and extra long operating time

Applications

- Detect RF leakage (egress) sources with the fast "Find and Fix" leakage feature and HD-1 antenna
- Patrol for RF leakage from the service vehicle with the aid of the optional docking station and magnetic mount antenna
- Certify that all channels in the home network are within system or regulatory RF level specifications with the one-button Installation Test
- Track down disruptive return path ingress sources with the Ingress Scan feature
- Identify high/low frequency roll-off at the subscriber drop using the Scan measurement with user-defined limits
- Differentiate leaks in overbuilt systems with the LT1000 Leakage Tagger

Key Features

- The Leakage mode's large numeric readout, audible alarm, and fast response time makes finding hidden egress sources easy
- User-defined analog and digital level limits guarantee that your active channels are within system specification when using the Scan, Installation, and Auto-test measurements
- The Ingress Scan measurement offers an efficient pass/fail indicator as well as adjustable dwell times and peak holds to find transient return path ingress signals
- Meter configurations can be cloned from meter-to-meter or downloaded from StealthWare Data Analysis Software
- When paired with the optional LST-1700 Transmitter, the CLI-1750 is capable of 5-862 MHz mini-sweep and FDR fault locator for qualifying in-home wiring



Notes: The CLI-1750 Leakage Meter may be combined with the LST-1700 for form the Home Wiring Test System. Some of key features include:
- Signal Scan mode shows all channel levels at once
- digiCheck™ digital signal average power measurement option
- Sweep and FDR mode finds cable, component, and craftsmanship-related faults
- Frequency agile leakage detection and measurement
- Pass/fail check ensures FCC compliance and reduces subscriber call-backs

The StealthWare Option is available on both the CLI-1450 and CLI-1750. StealthWare is a software package that transfers measurement files stored in your field meter to your PC for advanced analysis, reporting, printing, and archiving of test results.

Customer Premises Testing

Analog and Digital Voice, Video, and Data Signal Level Meters • Leakage Meters • Whole Home Wiring

3

IVT-600 Tri-Porter

Voice, Video, Data, and Cable Test Meter

The Tri-Porter is the test solution for VoIP, home networking, wholehome DVR, and residential gateway installation. It combines a full suite of features for performing essential tasks including coax/cat-5/3 testing, wiremapping, outlet identification, basic Ethernet testing, network capacity verification, POTS-SLIC emulation tracing, and advanced tone generation.

Highlights

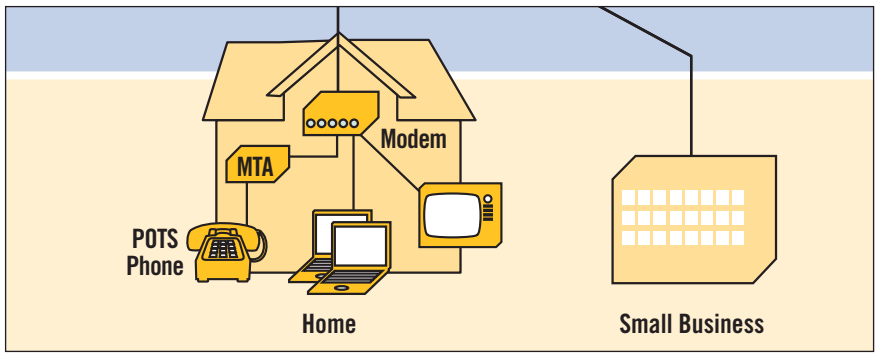
- Tests newly-installed network cables on unpowered systems or checks active working networks to detect any physical layer or configuration problems
- Performs RF Detection and Testing
- Tests and verifies proper operation of each telephone outlet to assure adequate signal levels for all offered services.
- Tests to TIA568 interconnect specifications and connected length; CAT5, 5E and 6

Applications

- Configure the network, test the cables, and guarantee the quality
- Qualify lines for VoIP service at 100Mbps speeds
- Ping for IP address information and configuration
- Test for opens and shorts
- Identify equipment on the other end of the line, showing its speed and type

Key Features

- DTMF decode to watch dialed call numbers for accuracy
- Speakerphone for hands-free listening to dial tone and line monitoring
- 20-pc remote wiremapping set
- Unique tone signal—which travels through splitter, filters, and traps to trace lines while the system is powered-up and in-use—is detectable by the Tri-Porter tracer unit



Customer Premises Testing

Analog and Digital Voice, Video, and Data Signal Level Meters • Leakage Meters • Whole Home Wiring

4

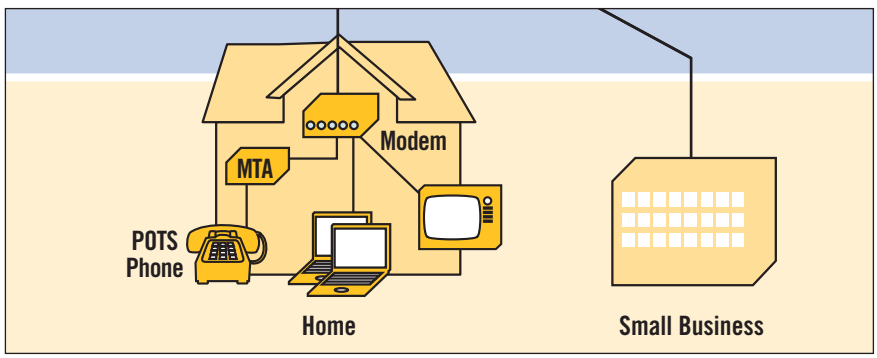
TP-300 Resi-Tester™ Whole-House Cable Tester

The Resi-Tester is a complete solution to identify and verify all wiring environments found in home networking and home automation. It tests and locates CATV, telephone systems, audio cable, security/alarm wiring, and network cabling. In addition, the Resi-Tester features multiple input ports and includes a variety of adapter cables so that any wire can be attached and tested.

5

LB-255 Ranger™ Test Set

The Ranger features all standard butt-set functionality in addition to incorporating advanced features. Advance features include DigiView™ DTMF Decode to see and capture digits as a dial-out is in progress, ADLI™ Auto Dial Line Identification inbound/outbound line identification and caller ID testing, Trafixguard™ to sense digital lines and identify under/over voltage conditions, and Insta-Talk™ amplification speaker with simultaneous intercom capability for talking while testing.



Customer Premises Testing

Analog and Digital Voice, Video, and Data Signal Level Meters • Leakage Meters • Whole Home Wiring

6

MS-1200D, MS-1300D, and MS-1400 MicroStealth™ Signal Level Meters

A full product line of signal level meters for installation technicians

The MicroStealth (MS) signal level meters provide comprehensive and advanced test performance, durable design, and low cost. The versatile platform offers a model for varied skill levels and budgets. MS meters are light-weight, portable, durable, and water resistant.

This family of JDSU MS Signal Level Meters offer simple yet comprehensive, reliable measurement performance to meet the needs of installers requiring both analog and digital measurement capability. The MS Signal Level Meter also provides an upgrade path to the JDSU CLI meters which add leakage detection capability.

Highlights

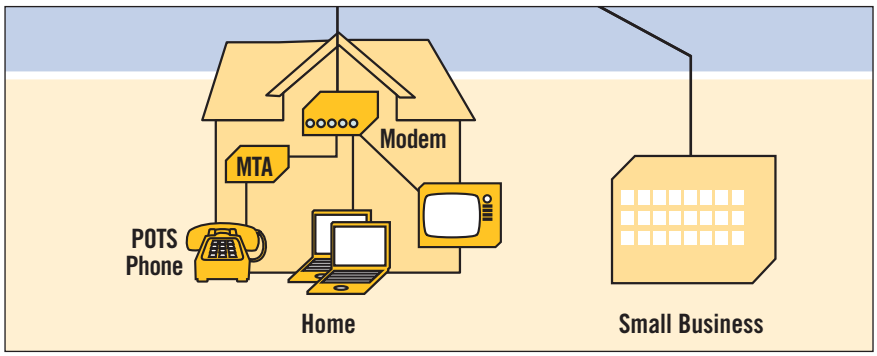
- MS-1200D - A digital signal level meter that includes our patented digiCheck™, a standard 5-890 MHz frequency range, Tilt, and Full Channel Scan
- MS-1300D - A digital signal level meter that includes our patented digiCheck, a standard 5-890 MHz frequency range, Reverse Ingress Scan, interval auto-testing, file storage, and StealthWare compatibility
- MS-1400 - The industry standard for advanced installation technicians. It offers a complete digital average power test capability and is available with an international language graphic interface. It can also be upgraded for leakage measurement capability
- Every MS model is designed to exceed the adverse conditions expected in everyday field use

Applications

- Prepare subscriber drop for advanced services with analog/digital TV and downstream cable modem signal level measurements
- Verify subscriber signal levels with system limits applied
- "Find and Fix" intrusive return path signals with Ingress Scan spectral display
- Perform 24-hour testing with the auto-test scheduling feature
- Document subscriber drop performance by transferring test measurements to StealthWare Data Analysis Software (MS-1300D and MS-1400 only)

Key Features

- Full Scan measurement displays levels of all channels in a single spectral screen
- Measurement limits provide instant pass/fail status on all Scan, AutoTest, and Installation Test measurements
- One button Installation Test verifies that all active channels are within cable network level specifications with printable results
- Ingress Scan measurement identifies unwanted ingress on the return path. It includes peak hold and adjustable dwell time to capture intrusive transient signals
- digiCheck measures digital average power on digitally modulated carriers
- The MS-1400 firmware is easily field upgradeable to the newest release using JDSU's CLI firmware upgrade software; the MS-1200D/1300D firmware is factory upgradeable only



Note: The StealthWare Option is available on all the MicroStealth products. StealthWare is a software package that transfers measurement files stored in your field meter to your PC for advanced analysis, reporting, printing, and archiving of test results.

Outside HFC Network Testing

Sweep Meters • Sweep Analyzers • Maintenance/Service Level Voice, Video, and Data Signal Level Meters

7

DSAM-6000 Network Maintenance Sweep Meter with DOCSIS® / EuroDOCSIS® Capabilities

A Wavetek™ Series Field Meter

The DSAM-6000 combines the high-level triple-play functions of other DSAM models with JDSU's patented Stealth Sweep™ technology to test and maintain both the downstream forward path and upstream return path. The DSAM-6000 is built specifically for the network and service level technician.

Highlights

- Digital video, analog video, DOCSIS® IP testing, Sweep (optional), and PacketCable™ VoIP (optional) available in one meter
- Forward sweep option allows sweeping of analog, digital, and DOCSIS carriers
- Reverse sweep option available for the return path
- Compatible with existing JDSU Stealth Sweep Systems, assuring non-interfering forward and reverse sweep operation compatible with today's digital carriers
- TPP client-server software enables resource and staff management
- Rugged, lightweight design withstands rain, cold, heat, bumps, drops, and other accidental mishaps
- Extensive In-meter Help and multiple language support

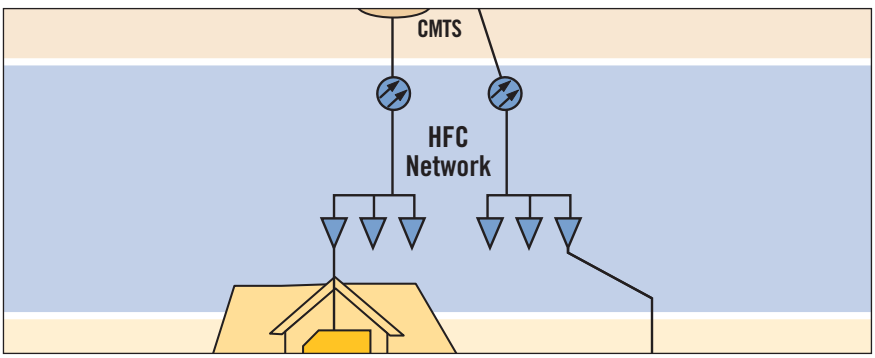
Applications

- Reference analog and 64/256 QAM signal types eliminate subscriber sweep interference
- Upstream and downstream verification with CMTS using DOCSIS/EuroDOCSIS protocols; includes DOCSIS/RF IP throughput and packet loss performance testing; VoIP test options available
- Digital carrier performance with Quick QAM summary of MER/EVM and pre/post FEC BER
- PC configuration issues isolated via Web-access test through customer's cable modem; Ethernet IP throughput and packet loss tests performed
- Preconfigured automated tests for digital, analog, and DOCSIS channels
- Optional Test Productivity Pack software provides browser interface over the DOCSIS RF link to operator's workforce management

Key Features

- Forward and Reverse Sweep (optional)
- Stealth™ Sweepless Sweep
- Dual ports - directional test points
- Digital Quality Index (DQI) provides faster, more advanced digital quality measurements
- PathTrak™ Field View (optional)
- TechComplete™ Test Productivity Pack (TPP) software
- DOCSIS, versions 1.0, 1.1, and 2.0 based optional PacketCable™ VoIP test capability
- Packet loss, latency, jitter, and throughput measurement modes
- Errored Seconds and Severely Errored Seconds
- QAM Ingress, Hum Analysis, and Return Alignment
- 4 to 1000 MHz range; 8 MHz and 6 MHz models
- Analog and digital signal level capabilities including mini-scan, tilt, full-scan, and constellation.
- Carrier to Noise

See Feature Matrix on page 11 for more specific details.



DSAM Detailed Feature Matrix

	FEATURE	MODEL			
		DSAM -1500	DSAM -2500/-2600	DSAM -3500/-3600	DSAM -6000
Secure Sync™	HTTPS communication to TPP server behind the firewall	X	X	X	X
Analog and Digital Carrier Level Verification *(Carrier to Noise)* *24 Hour Auto Test* (1)	Aural and visual levels	X	X	X	X
	Average digital power level	X	X	X	X
	Tilt (1 to 12 Channels)	X	X	X	X
	Mini-scan (1 to 12 Channels)	X	X	X	X
	Full-scan (1 to 999 Channels)	X	X	X	X
	Analog Carrier-to-noise	X	X	X	X
	Test Point Compensation	X	X	X	X
	One Key Video Autotest	X	X	X	X
	Hum		X	X	X
	Downstream Spectrum	Option	Option	X	X
Digital QAM Carrier Quality (64, 256) *DQI*	Carrier Digital Quality Index™ (DQI) Score	X	X	X	X
	Pre and Post FEC BER (64, 128, 256)	X	X	X	X
	Constellation (64, 128, 256)	Option	Option	X	X
	Errored/severely errored seconds		X	X	X
	BER for Deep Interleave (128,4)		-2600 only	-3600 only	X
	QAM Ingress		-2600 only	-3600 only	X
Home Network Verification	IP tests via Ethernet jack			X	X
	Ingress Resistance Test (IRT)	X	X	X	X
	Fault Location using FDR feature in LST-1700 remote transmitter	X	X	X	X
Upstream Physical Verification	Upstream 2-way connectivity and level test with margins (DOCSIS® range results)	X	X	X	X
	Local Upstream Spectrum for ingress check	X	X	X	X
	Return QAM Generator (16 QAM upstream)	Option	Option	X	X
	Field View of headend Upstream Spectrum	Option	Option	Option	Option
DOCSIS®/ EuroDocsis™ Cable Modem Service Verification Over RF	DOCSIS® downstream QAM performance (MER/EVM)	X	X	X	X
	Downstream Pre and Post FEC BER		X	X	X
	Dynamic DOCSIS® Range and Registration		X	X	X
	Cable Modem config file verification		X	X	X
	Internet access verification via Web Access Test		X	X	X
	Open Web Browser (2)	Option	Option	Option	Option
	Cable modem and CPE MAC cloning		X	X	X
DOCSIS®/ EuroDocsis™ IP Service Tests Over RF	Roundtrip Packet Loss		X	X	X
	Specified US and DS Packet loss		X	X	X
	Specified US and DS Throughput		X	X	X
	Ping Testing		X	X	X
	VoIPCheck DOCSIS® VoIP Verification		Option	Option	Option
	PacketCable™ VoIP Testing (3)	Option	Option	Option	Option
PC Emulation over Ethernet	Web Access test using subscriber cable modem		X	X	X
	Open Web Browser (2)	Option	Option	Option	Option
	View CM diagnostics page			X	X
RF Network Verification *Reverse Alignment* (1)	Forward Sweepless Sweep			Option	X
	Reverse Alignment(1)				X
	Forward (Downstream) Sweep				Option
	Reverse (Upstream) Sweep				Option
Other available Options	Home Certification Testing	Option	Option	Option	Option
HFC Network Verification	Scheduled Autotest(1)	X	X	X	X
	Proof Test(1)	X	X	X	X

Notes:
(1) Available soon via software update
(2) Function integrated with JDSU TPP Field Data Management Software, a client/server based PC application software used to manage DSAM field meters and test data from a central location.
(3) VoIP available for North American PacketCableTM based systems. Contact Local JDSU office for compatibility and availability for specific systems.

Outside HFC Network Testing

Sweep Meters • Sweep Analyzers • Maintenance/Service Level Voice, Video, and Data Signal Level Meters

8

SDA-4040D Stealth Digital Analyzer
SDA-5000 Stealth Digital Analyzer
Stealth digital analyzer and sweep system

The SDA-4040D and SDA-5000 are used for HFC network testing and deployment of digital video and traditional analog services. The SDA-5000 goes a step further by adding the ability to perform Sweep Testing in conjunction with the SDA-5500 or SDA-5510 analyzer. Both meters provide a lightweight, weather resistant, rugged, and affordable single instrument with the versatility to test digital services as well as maintaining the analog spectrum. The versatile combination of standard features and available options enables either meter to be customized. The SDA-4040D may be upgraded to the SDA-5000 in order to meet the forward and return path sweep testing requirements.

Highlights

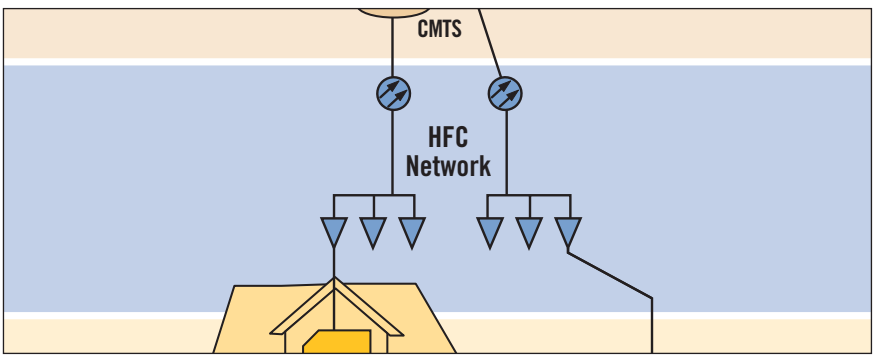
- Qualifies the network for today's high-growth triple-play services
- Reduces technician time for the most labor intensive maintenance and troubleshooting
- Increases the efficiency of service calls and reduces troubleshooting time
- Advanced QAM analysis for 64, 128, and 256 QAM (optional)
- Spectrum display from 5 to 1,000 MHz with cable modem analysis (Zero Span mode)
- Totally non-interfering sweep, specifically for 64, 128, and 256 QAM digital channels
- Rugged, weather-resistant, and lightweight

Applications

- Non-interfering, continuously referenced Stealth Sweep™
- Cable modem analysis using Zero Span mode
- Full in-service, proof-of-performance analyzer
- QAM View option provides complete analysis of digital TV and forward cable modem signals
- Cable technicians working in the field can see the reverse path at the Headend; find ingress fast with PathTrak™ Field View option
- Enables easy preparation of networks for interactive services with a 5 to 1,000-MHz, fast, sensitive spectrum analyzer

Key Features

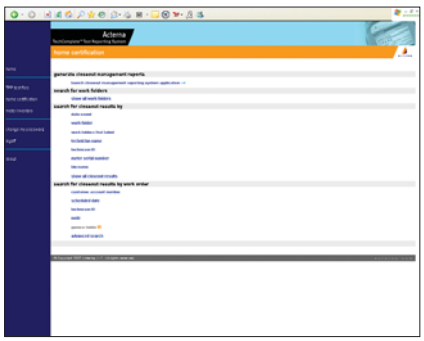
- Non-interfering forward and reverse Stealth Sweep™ in one handheld instrument
- QAM View includes BER, MER, and constellation
- Equalizer stress and microreflections
- QAM ingress (noise-under-carrier)
- New graphical test point compensation for easier setup



Note: The StealthWare Option is available on both the SDA-4040D and SDA-5000. StealthWare is a software package that transfers measurement files stored in your field meter to your PC for advanced analysis, reporting, printing, and archiving of test results. Key features include the following: Data Center file management, Analysis Tool, Graph Tool, Channel Plan Tool, and a Report Generator.

Instrument Productivity Solutions

Home Certification Solutions • Asset Management Software • Meter/Probe Optimization



TechComplete™ Home Certification Option

Increase triple-play customer retention and workforce efficiency by making sure installations work right the first time. With the JDSU TechComplete Home Certification Solution, the DSAM family of test instruments is able to provide electronic methods and procedures that automate Home Certification testing on the instrument, reduce capital expenditures, and eliminate costly rework. Results are uploaded remotely over the existing RF plant's DOCSIS® channel to a central, management-accessible results database. By enforcing consistent and clear procedures for Home Certification testing, uploading results immediately to a central MySQL database, integrating test results with work order detail, and providing reports on the test data, operators can significantly reduce their repeat service call rates. This saves time and money and proactively establishes a repeatable quality work process. In addition, it improves customer satisfaction by ensuring that the service call is preformed correctly the first time. When combining the DSAM Home Certification option in conjunction with TechComplete Test Productivity Pack (TPP) Server Software, a complete end-to-end solution is attained.

Highlights

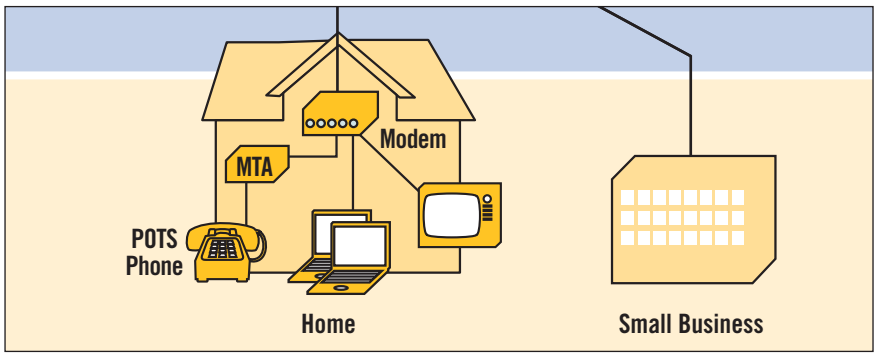
- Automates test procedures on instruments.
- Provides value-added reports for the analysis of data
- Facilitates call escalation between service/install groups and plant/maintenance groups
- Helps reduce repeat service calls by facilitating a process for the technician to perform a comprehensive and consistent process for each job, every time, verified by test data
- Automates integration of test data into an existing work order management system
- Creates a system-wide standard for initiating and interpreting test results
- Results in standards and consistent procedures that ensure quality based on quantitative test data
- Central repository for test data provides management reports and trends for data analysis

Applications

- Reduce failure frequency and repeat dispatch visits due to mis-provisioning or improper testing
- Increase compliance to rigorous test standards
- Improve efficiency of customer care, dispatch, and NOC workforces
- Meet regulatory requirements
- Improve time-to-repair and decrease service downtime rebates
- Improve productivity by provisioning new services quickly and accurately
- Lower training costs by bringing automation and consistent test procedures to the instrument
- Easy access to test data by the creation of a central repository for test data that provides management reports and trends for data analysis
- Create a system-wide standard for initiating and interpreting test results

Key Features

- Works in conjunction with the DSAM family of test instruments and TPP software
- Increases workforce efficiency by providing a wizard interface to ensure tests are properly annotated and operated
- Integrates with your workforce management/billing system (ICOMS, DST Innovis, CSG) enabling electronic work orders and management level reports
- Automates the process for the technician so that it is simple and easy to follow
- Enforces the test in the instrument while ensuring that each installation and service call is done right the first time, with proper performance margins tested and recorded
- Establishes the test parameters and criteria from a central location so that consistency is maintained
- Establishes clear and standard test procedures that all technicians must adhere to before a call can be completed
- Provide management level reports to ensure compliance and success of home certification tests



Instrument Productivity Solutions

Home Certification Solutions • Asset Management Software • Meter/Probe Optimization

10

TechComplete™ Test Productivity Pack

Software for maintaining and optimizing your DSAM and RSAM meters

The TechComplete Test Productivity Pack software contains the essential tools needed to maintain and optimize the use of DSAM meters and RSAM probes to their fullest. The Test Productivity Pack (TPP) provides Field Data Management, RSAM Remote Access, Meter Browser Management, and DSAM Remote Access. With a centrally stored MySQL database and client server architecture, HFC testing is under complete control. TPP software helps to increase workforce efficiency by providing Web access of previous test results (birth certificates) on a DSAM or PC to facilitate troubleshooting and problem escalation.

Highlights

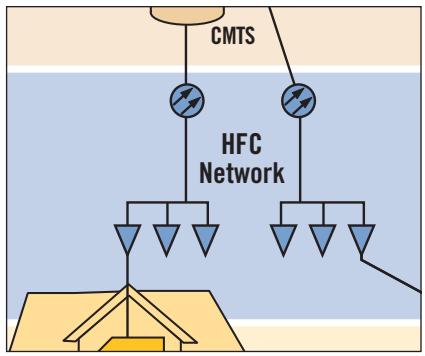
- Maximize field productivity to better serve triple-play customers through effective meter management and quick access to historical test data
- Secure Sync™
- Keeps meters current; allows synchronization meter data to update channel plans and pass/fail limits over RF or LAN
- Manages assets of DSAM and RSAM families; maintains and displays inventory, firmware, and calibration status
- Provides remote access to RSAM probes; view results units on a PC or via DSAM Web browser option
- Centrally manages DSAM browser access; allows creation of custom home pages to give technicians quick access to sites
- Displays and controls remote DSAMs; allows experienced technicians to troubleshoot without driving
- Maintains important data; provides a central database of channel plans, limit plans, and field results with remote client accessibility
- As part of the TechComplete suite of efficiency tools, provides comprehensive tools that increase the productivity of your daily testing

Applications

- Prioritize and effectively plan work for maintenance team by using Test Productivity Pack's central repository of test data to create trending reports showing potential plant issues
- Test once, test correctly: eliminates callbacks by doing the correct test
- Verify tests: synchronizes test data and review results
- Reduce drive time: provides access to remote RSAMs and DSAMs
- Increase productivity: meter browser management provides ability to view multiple remote applications from DSAM meters
- Use talent efficiently: experienced technicians can manage remote hubs and help less experienced technicians
- Manage your meter investment: keep meters up-to-date and provide supervisor control over settings

Key Features

- Reduced IT maintenance and deployment by using Internet based server software
- Client-server architecture for field data management and reporting tools
- Web-based interface for remote forward path monitoring
- Web-based interface to stored DSAM measurement files
- Customizable Web-based interface for DSAM meters
- Scaleable solution provides easy growth and expansion



11

FDM-100 Field Data Management Software

FDM-100 software helps users manage meter assets, channel and limit plans, and field measurement data on a limited basis. This provides a powerful solution to help manage test instruments and test results and to ensure that test procedures are consistent across users. FDM-100 helps to increase workforce efficiency by enabling field sync using RF or LAN to update channel and limit plans, preventing wasted time testing with wrong plans. Test Productivity Pack is recommended for MSOs that need to perform more exhaustive asset, channel, and limit plan management.

HFC Monitoring and Maintenance

Forward/Return Path Monitoring and Maintenance • QoS, VoIP, IPTV, and Metro Ethernet Testing

PathTrak™ Return Path Monitoring and Maintenance System

PathTrak™ HFC Performance Monitoring is the top-selling HFC Return Path Monitoring and Maintenance System in the world. It is the only return path system powerful enough to simultaneously monitor and record detailed performance history while supporting field and NOC troubleshooting with Web-based and JDSU meter-based real-time displays. It increases network availability for lucrative triple-play services and helps to retain the most profitable customers by easily and quickly detecting fast impulse noise, ingress and CPD on all nodes before service quality is affected. Additionally, it enhances the value of the PathTrak investment by providing Web-based access to node certification reports and live spectrum and detailed upstream performance history reports to more people.

Highlights

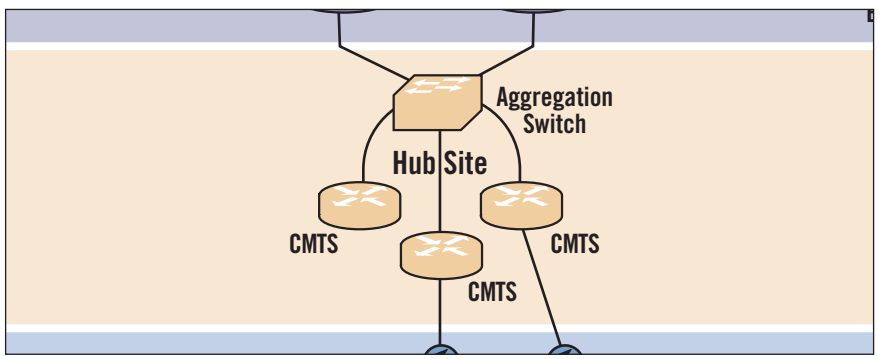
- Reduce unnecessary truck rolls by filtering out false alarms and determining severity of problems
- Increase workforce efficiency and reduce labor costs by using historical data to determine optimum time of day to schedule maintenance to fix an issue trending towards disruption of service
- Uses ultra-fast, remote spectrum analysis to detect the most transient noise and ingress
- Automates node certification and node ranking to prioritize field maintenance of "top offenders"
- Qualify RF return path for VoIP deployment to detect system problems before customers are affected
- Broadcasts live spectrum displays in the field or office for faster troubleshooting without impairing monitoring functions or utilizing headend personnel
- Stores detailed historical performance data to reveal performance trends and aid in pro-active maintenance; optional PathTrak WebView for Internet-accessible node ranking, spectrum analysis and performance history data
- A scaleable system designed to grow as the network grows

Applications

- Easily and quickly detect fast impulse noise, ingress, and CPD on all nodes before customer's service is affected; detect minor problems before major outages occur
- Establish comprehensive certification and commissioning standards
- Reduce troubleshooting and fault location times
- Compare RF performance history data from PathTrak with digital services error reports to diagnose whether problem is a physical HFC plant issue or an IP data layer issue before dispatching a technician
- Isolate problems to a single return path with remote, real-time spectrum analysis
- Easy analysis of past performance
- Utilize performance history trending reports to determine which upstream frequencies are safe to use for digital services carriers and which ones should be avoided
- Compare past RF network performance to other element management error reports

Key Features

- Ultra-fast scanning
- Remote spectrum analysis
- Efficiently prioritizing network problems and focusing your workforce
- Effective alarms and intelligent alarm management
- Economically scalable system
- Customized and flexible review of historical data
- Tracking and documentation for quality assurance of contract labor performance



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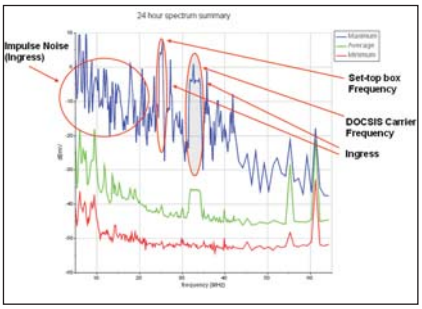


PathTrak™ WebView Server

JDSU understands that while increased workforce efficiency is vital to deploying VoIP faster, maintaining network security is of equal importance. PathTrak WebView software addresses these challenges by allowing remote access to the most-used troubleshooting tool—the live spectrum analyzer—and to beneficial performance history reports via the Internet. By accessing live spectrum views and generating reports from outside the corporate LAN, operators can remotely troubleshoot upstream issues.

One of WebView software's most unique advantages is the ability to automate the node certification process, replacing the manual process that currently consumes valuable resources, manpower, and time. With customer demand for rapid deployment of VoIP services, fast, accurate node certification becomes even more critical. WebView calculates and ranks the RF upstream performance of the nodes, and it provides a quantitative ranking from worst to best of each node's performance over a user-specified timeframe. This takes the guesswork out of node certification and eliminates manual searches through other monitoring systems and trouble ticket data. It also allows operators to prioritize their workforce more efficiently once the software isolates nodes that need attention.

Highlights

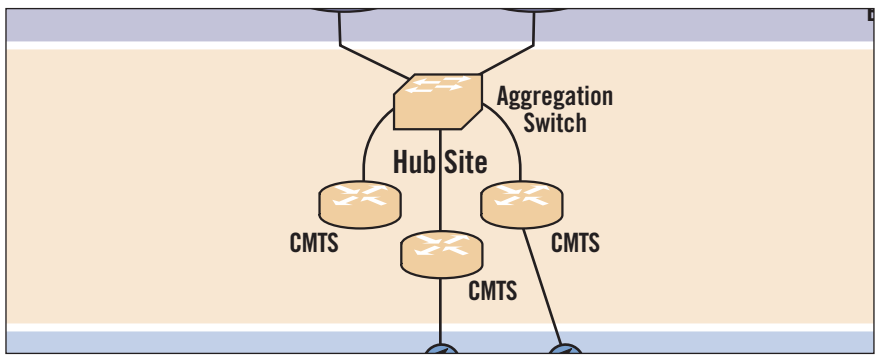
- Enhances the value of the PathTrak investment by providing Web-based access to node certification reports, live spectrum and detailed upstream performance history reports to more people
- Decreases time spent analyzing and troubleshooting trending data, enabling efficient prioritization of plant maintenance
- Automates node certification and node ranking to prioritize field maintenance of "top offenders"
- Open MySQL database permits remote access to measurement data by reporting and analysis tools for the creation of node certification and performance history reports
- Open MySQL database facilitates custom reports and integration with other systems
- National views available via Web page as well as segmented views based on each user's related nodes
- Reduced IT maintenance and deployment by using Internet based server software
- Remote Web-based access to PathTrak performance history data and live spectrum views
- Unlimited Web-based user access vs. maximum of 30 simultaneous PathTrak clients
- Node search by name

Applications

- Rank node RF upstream performance based on quantitative test data gathered by PathTrak
- Intelligently prioritize and plan field maintenance activities rather than manually sorting alarms by utilizing WebView's automated daily node certification reports
- Drill down to review live and historical details on a node-by-node basis
- Access the live return spectrum analyzer data from virtually any PC via Internet Explorer to reduce MTTU (mean time to understand) and MTTR (mean time to repair)
- Give individual remote users full control of measurement parameters such as dwell time, resolution bandwidth, and video bandwidth
- Compare past RF network performance to other element management error reports

Key Features

- Reduced troubleshooting and fault location times
- Web-based access via Microsoft® Internet Explorer browser
- Password protected entry from Internet Explorer browser
- Customer choice to place behind the firewall
- VPN for secure viewing of WebView data
- Web-based remote spectrum analysis
- Economical, scalable system
- Customized and flexible creation of historical data reports



HFC Monitoring and Maintenance

Forward/Return Path Monitoring and Maintenance • QoS, VoIP, IPTV, and Metro Ethernet Testing

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PathTrak™ Forward Path Monitoring and Maintenance System

Proactively and economically identify forward path problems faster by providing an inexpensive solution to remotely monitor the forward path analog and digital channels used for VoIP, video, and HSD. The RSAM-5600 saves technician time daily by remotely testing QAM and Analog RF including MER, BER, and level. A Web-based interface provides viewing on DSAM meters or PC Internet browsers.

Highlights

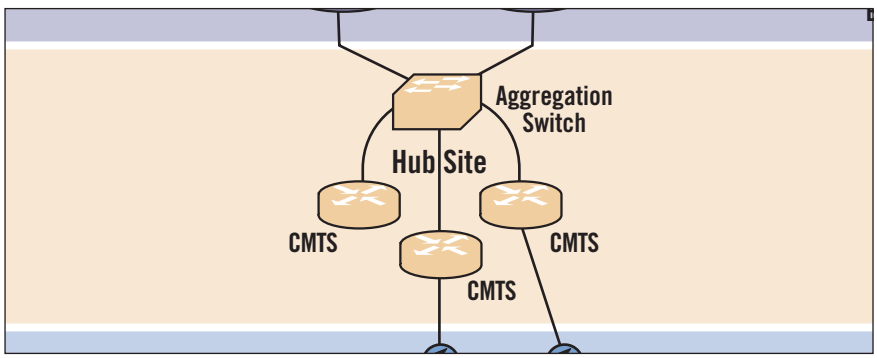
- Increases network availability by proactive notification of forward path degradation, before service is disrupted through OSS compliant SNMP interface
- Tests QAM and Analog RF for Level, Spectrum, Constellation, MER, BER and Delta V/A
- View results in the field on DSAM meters or PC Internet browsers
- SNMP alarms integrate with OSS and NMS platforms
- Integrates with up to eight ISS-5116 input selector switches to monitor up to 128 inputs

Applications

- Perform daily system checks of remote hub sites without a truck roll
- Quickly isolate field problems by comparing headend and field results on DSAM meters
- Continuously scan and monitor QAM and Analog RF carriers with SNMP alarming
- Full scan report shows graphical results of carrier levels compared to limits
- Ensure VOD, HSD, and VoIP services remain operational through proactive testing

Key Features

- Internet server-based software eliminates the need for client licenses
- QAM analysis, including power level, spectrum, MER, Pre/Post BER and constellation view
- Analog RF analysis includes video level, audio level, and Delta V/A
- Reduce IT maintenance and deployment costs by using Internet based server software



HFC Monitoring and Maintenance

Forward/Return Path Monitoring and Maintenance • QoS, VoIP, IPTV, and Metro Ethernet Testing

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QT-600 Ethernet and Triple-Play Probe

A carrier-grade, scalable, multiservice IP Ethernet testhead

This Ethernet IP testhead combines active and passive QoS performance monitoring and analysis with flexible on-demand and scheduled testing for VoIP, IPTV, and Metro Ethernet services. It uses a distributed approach to monitor and analyze QoS and service availability and rapidly isolates faults and performs troubleshooting for service turn-up verification.

Highlights

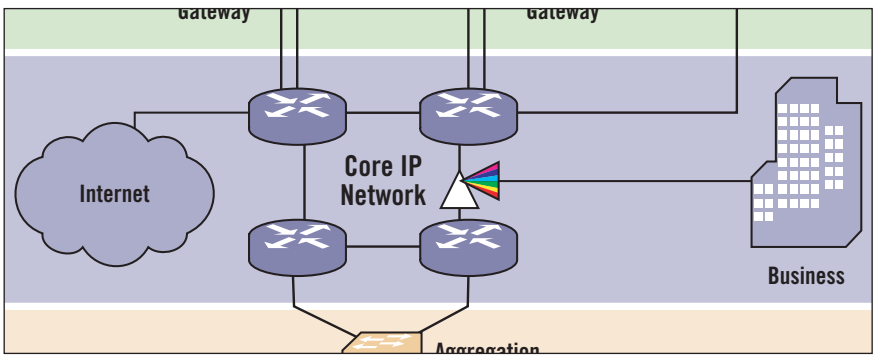
- Configurable automated test access control
- Multi-service and multi-application
- Metro Ethernet, VoIP, IPTV

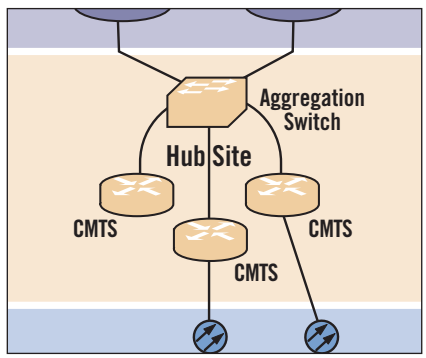
Applications

- Passive IP network monitoring with trending, statistics and Top-N views
- Active 2544 loopback testing for installation verification and trouble isolation
- Active IP testing such as Ping and TraceRoute for trouble isolation
- Active VoIP call generation (up to 4 simultaneous calls per QT-600)
- Passive VoIP call monitoring (up to 8,000 simultaneous calls/ 16,000 streams)
- Active VoIP Performance Monitoring provides consistent call volume and connectivity over which to evaluate network VoIP call quality
- Simultaneous monitoring of over 1,000 IPTV Transport Streams

Features

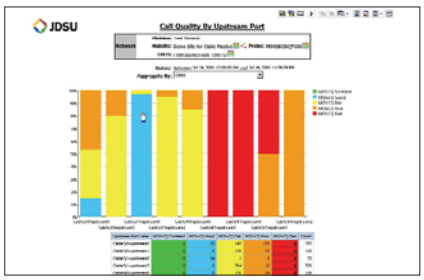
- Ping, TraceRoute
- RFC-2544 (Throughput, Latency, Frame Loss, Back to Back) automated loopback
- Full line-rate Capture with Filters and Triggers viewing through Examine
- Passive Analysis (Top N Classifiers, Data Utilization, Frame Statistics)
- VoIP Active call generation and per call QoS (Jitter, MOS/R-Factor)
- Signaling Capture with decodes
- VoIP Passive Monitoring over 8,000 simultaneous calls
- IPTV Passive Monitoring over 1,000 simultaneous TS with QoS reporting (MDI, VMOS, Loss Distance, Loss Period, PCR Jitter, Packet Loss, RTP Jitter, Alarms)

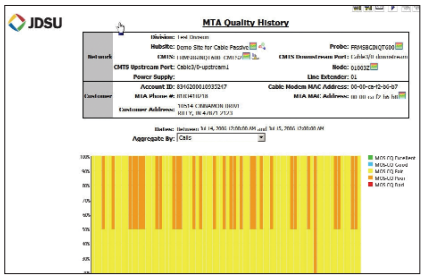




HFC Monitoring and Maintenance

Forward/Return Path Monitoring and Maintenance • QoS, VoIP, IPTV, and Metro Ethernet Testing





NetComplete Service Assurance for Cable VoIP

Assuring the quality of cable voice service is paramount for cable operators who are competing against traditional Telco's with the goal of increasing their average revenue per household. The NetComplete's Cable Voice Service Assurance Solution allows cable operators to effectively scale their network and operational resources as service penetration increases by proactively managing voice quality. This ultimately translates into increased customers, customer satisfaction, and customer retention.

The NetComplete Cable solution is comprised of a suite of hardware and software components, including the QT-600 IP services probe, the PathTrak Forward & Return Path Monitoring System, the NetOptimize Performance Management OSS, and interfaces to various CMTS models and customer record systems. Combining this integrated capability in one platform empowers customer service technicians to quickly troubleshoot individual customer voice quality problems, and network operations personnel to proactively manage network quality as the subscriber base grows.

Highlights

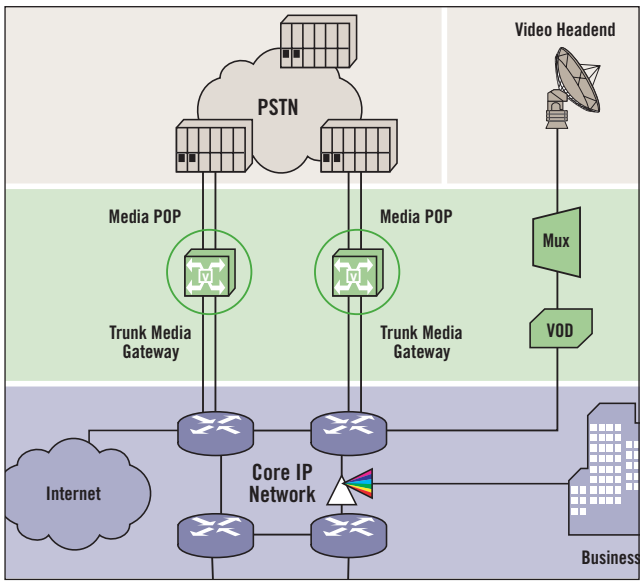
- Proactively detects degradation or "hot spots" by continuously monitoring and correlating network and service performance
- Rapidly sectionalizes problems with appropriate cues for correct problem resolution
- Automatically associates customers to problems and metrics to speed the troubleshooting process
- Provides network operations personnel with an integrated toolset and visibility to all pertinent network and service metrics

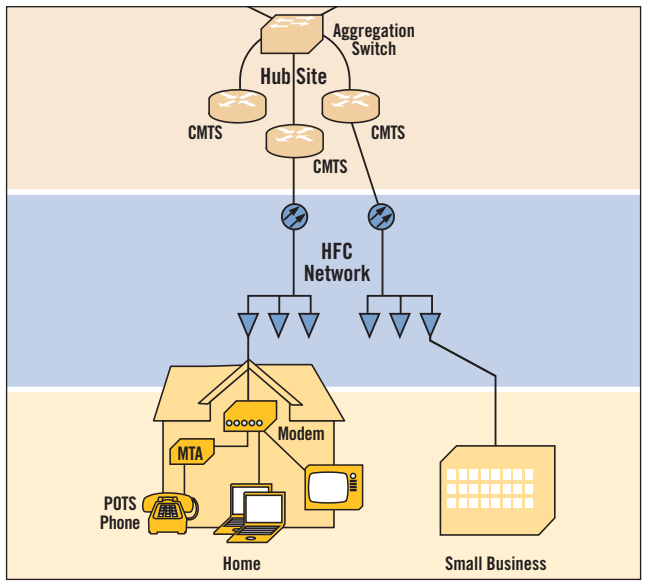
Applications

- Passive call monitoring for customer problem analysis and sectionalization

Key Features

- Detailed R factor/ MOS scoring for accurate call quality evaluation
- Automatic correlation of customer call quality to quality in the HFC plant and CMTS
- Automatic call quality degradation highlighting shows IP network contributing factors for poor voice quality
- Integrated RF upstream and downstream performance statistics to determine cable plant issues





VoIP and Video Protocol Analyzers

MPEG-2 Testing/Analysis • 10/100/1000 Ethernet/WAN/ATM/VoIP Analysis

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DTS-330 Digital MPEG Test Platform
DTS-200 MPEG-2 Field Instrument

The DTS-330 is a lab grade digital video test platform offering six different combinations of MPEG-2 (DVB and ATSC) transport stream generation, capture, stream creation, and analysis. The DTS-200 is a remote field test instrument designed to let operators gain remote visibility into their MPEG-2 streams and perform various test applications.

Highlights

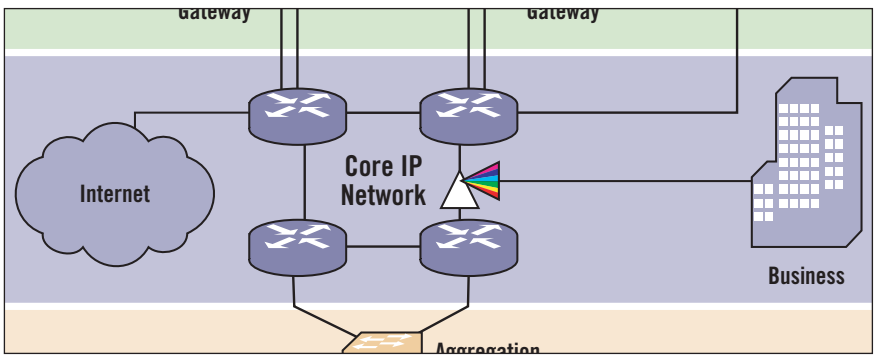
- DTS-330 provides a one box solution eliminating the need to purchase additional test tools
- Real-time analysis minimizes the hassle and delay of capturing files for later detailed analysis
- Flexible, modular design minimizes cost and provides add-on capabilities as testing requirements change
- Easy-to-use Microsoft Windows XP interface provides beginner and expert users with quick, easy access to needed information

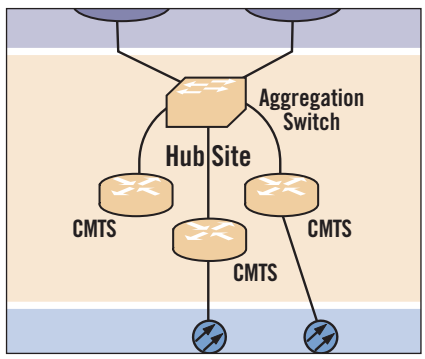
Applications

- R&D: aggressive design validation enables manufacturers to reach the market faster and guarantee quality
- Deployment trials: tests leading-edge technologies such as digital terrestrial TV and statistical multiplexing
- System installation: solves configuration, interworking, and performance issues prior to system acceptance and turn-up.
- Baselining: reports and monitors Quality of Service (QoS).
- Network troubleshooting: allows engineers to quickly isolate and diagnose problems.

Key Features

- Monitor, analyze, record, create, and play transport streams at speeds from 1 Kbps to 214 Mbps
- MPEG-4(H.264/AVX) analysis capabilities
- Simultaneous play and analyze for simulation and examination in real time
- Available interfaces include DVB ASI, DVB SPI, QAM, GbE, COFDM, 8VSB, SMPTE-310M, DHEI, and QPSK (Note that the DTS-330 has 4 inputs and 2 outputs while the DTS-200 has 1 input and 1 output)
- DTS-330 also adds the option to provide simultaneous analysis of two transport streams and simultaneous play-out of two transport streams; DTS-200 has 2 inputs which accept Plug In Modules (PIMs)





VoIP and Video Protocol Analyzers

MPEG-2 Testing/Analysis • 10/100/1000 Ethernet/WAN/ATM/VoIP Analysis

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DA-3400 Data Network Analyzer

Advanced data network analyzer for Ethernet, WAN, and ATM

The DA-3400 Data Network Analyzer incorporates intuitive, real-time analysis to identify the root cause of network and customer applications problems on 10/100/1000 Ethernet, WAN, ATM, Mobile, and VoIP networks.

Highlights

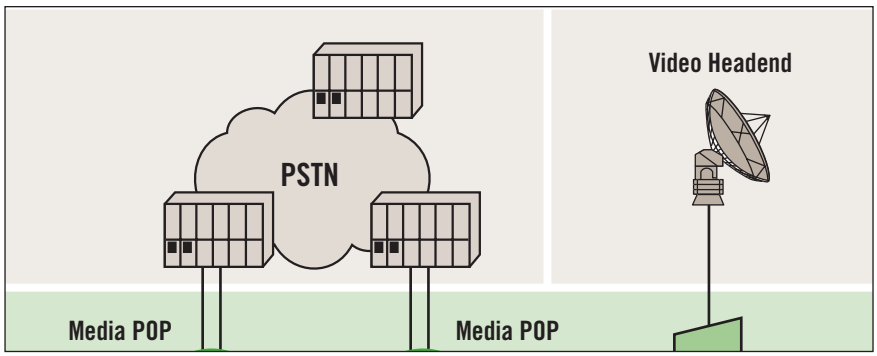
- Portable or distributed operation through IP or dial-up connection
- Single chassis with multiple interface support
- Industry leading VoIP or VoATM analysis
- Printable reports or database output format
- 1 Gigabyte line rate capture RAM with triggers and filters
- Historical analysis of selected time period
- Real-time analysis of routing, signaling, and authentication protocols
- Tunneling mode analysis for L2TP, GRE, and GTP

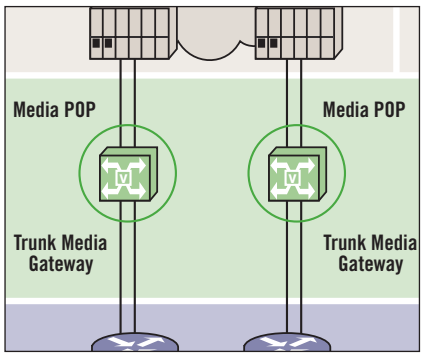
Applications

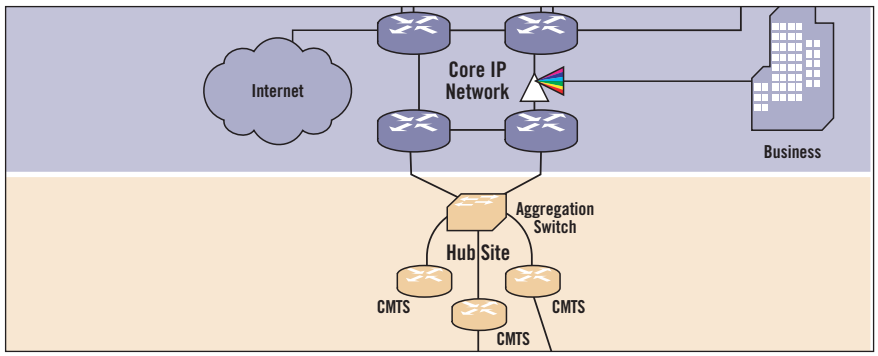
- VoIP call quality with problem segmentation expert
- VoIP call signaling trace with response codes
- Detailed TCP/IP application response analysis
- Expert analysis
- IP analysis with ATM SAR reassembly
- Ethernet network turn-up
- ATM 0.191 network turn-up

Key Features

- 10/100/Gigabit Ethernet support in a single module
- OC-3/STM-1 and OC-12/STM-4 in a single interface module
- T1/FT1, E1/FE1, DS3/FDS3 and E3 in a single interface module
- MPLS support
- Available in rack mount with 48 vdc power
- Extensive filtering including address, port number, and protocol
- Over 450 protocols decoded through Examine; plus another 1,000+ protocols identified.
- Local or remote use over Ethernet networks through NAT or firewalls
- Modem support
- Multiple unit synchronization using NTP







Optical, Ethernet and, Business Services

Fiber Characterization • CWDM,DWDM,1.5M to 10G SONET/SDH, Ethernet, and 10G LAN/WAN Testing

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FST-2802, FST-2310,and FST-2209, and FIREBERD® 8000 for the FST-2000 TestPad™

The TestPad Advantage for access, long-haul, and metro networks

The FST-2000 platform offers a comprehensive solution for technicians who are responsible for installing and maintaining a wide range of wireline services. Based on the rich T-BERD®/FIREBERD heritage, this portable platform features an intuitive, consistent, touch-screen user interface and modular support for testing datacom, DS1/DS3 services, SONET/SDH up to 10Gig, and 10/100/Gigabit Ethernet technologies.

Highlights

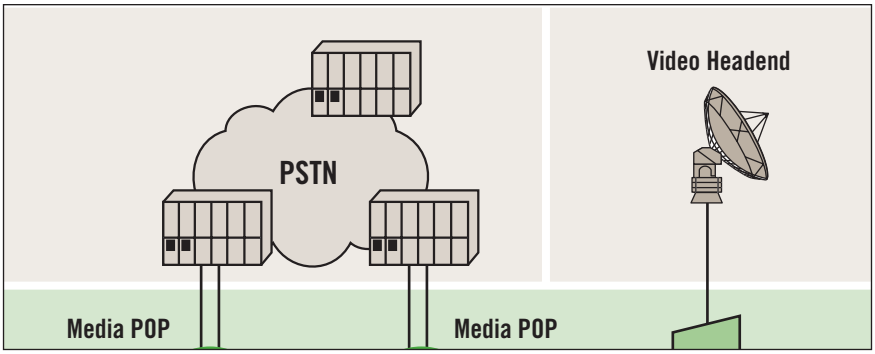
- **FST-2802** Single or dual-port test set designed for installation and verification of 10/100/1000 Mbps Ethernet Services and 1G and 2G Fibre Channel Services
- **FST-2510A** High-speed optical analyzer for testing DS1 to OC-192/STM-64
- **FST-2310** All-in-one, light-weight test set, designed to perform transmission testing from DS0 to OC-48, GR-303, ISDN, signaling, DDS, ATM and DS1 and DS3 jitter measurements
- **FST-2209** Field test set designed for installation and maintenance of DS0/DS1/DS3 services
- **FST-2207** Handheld test set designed for installation and maintenance of DS1/DS3/GSM services
- **FIREBERD 8000** Industry-leading portable for testing datacom circuits over EIA-530 (EIA-422 and 423), RS-449/V.36, RS-232/V.24, X.21, V.35 with balanced interface testing up to 18 Mbps

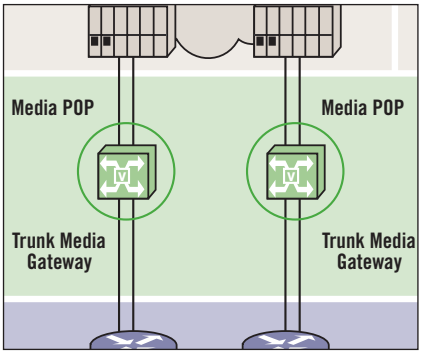
Applications

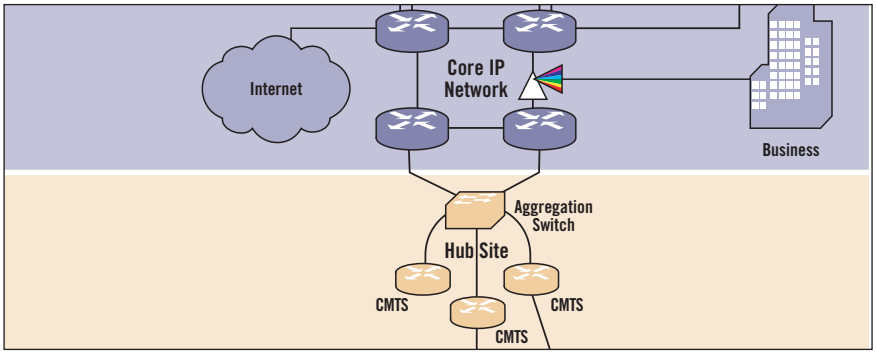
- Deploy, verify, and maintain new revenue-generating Ethernet business services by using RFC-2544 and verifying Layers 1, 2, and 3
- Verify end-to-end network performance by using bit error rate (BER) testing and a wide range of stress test patterns
- Generate full line rate traffic with variable traffic load characteristics to stress test 10/100/1000 Mbps Ethernet interfaces (optical and electrical options for Gigabit Ethernet)
- Generate and filter multiple traffic streams using different Class of Service (CoS) priorities (Q in Q, VLAN)
- Test Storage Area Networks with 1.0625 and 2.125 Gbps Fibre Channel services at 100% wire speed
- Perform optical testing at OC-3/12/48/192, STM-1/4/64/64, and electrical testing at E1/DS1/DS3/STS-1 rates
- Perform in-service monitoring of the circuit under test to ensure quality of service (QoS)
- Verify proper network timing by measuring jitter at DS1 and DS3 tributary interfaces.
- Qualify protocol services such as ATM, GR-303, and ISDN and decode protocol messages
- Monitor network voice quality and signaling
- Analyze DS1 tributaries at DS3 access points

Key Features

- Easy-to-use, touch-screen graphical user interface (GUI) simplifies and expedites testing
- Engineered for the field with rugged construction, lightweight design, and battery-powered operation
- Variety of applications such as Web browser, PDF reader, and online keyboard.
- File transfer protocol (FTP) for storage and transfer of results.
- Connectivity methods include RS-232, USB, LAN, 802.11b, and analog modem; easy remote control using VNC Web browser







Optical, Ethernet and, Business Services

Fiber Characterization • CWDM,DWDM,1.5M to 10G SONET/SDH, Ethernet, and 10G LAN/WAN Testing

T-BERD® 8000/MTS-8000 Field Scalable Test Platform

The most innovative and cost-effective optical test solution for long-haul and metro networks

Based on the rich T-BERD/MTS heritage, this field-scalable optical test platform is ideal for the installation and maintenance of next generation networks and services. The T-BERD/MTS-8000, in one scalable platform, supports multiple technologies including T1-10G SONET/SDH, 10/100/Gig Ethernet, 10Gig Ethernet LAN/WAN PHY, IP, Fibre Channel, Chromatic Dispersion, Polarization Mode Dispersion, OTDR, spectral attenuation, insertion loss, optical return loss, optical spectrum analysis (OSA), and more.

Highlights

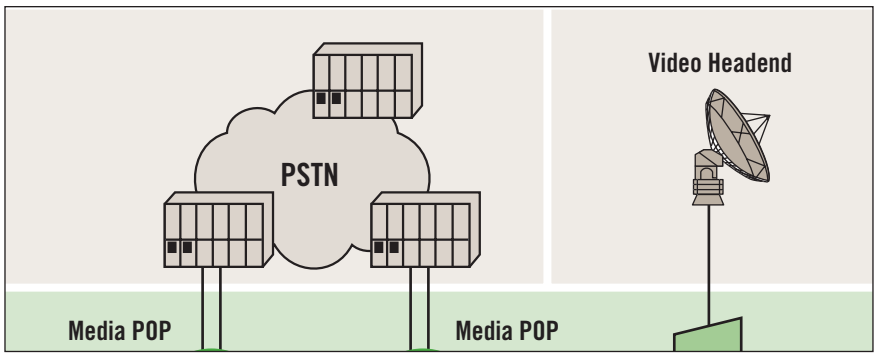
- Practically unlimited field modularity
- Built-in optical connection check functions with a high accuracy; power meter/source, VFL, ORL and video microscope options available ensure that today's most common optical problems are solved
- Truly field tailored with a compact design starting at 7.6 lbs, battery operation is possible up to 8 hours and a durability specification that exceeds Telcordia requirements
- Backwards compatible with existing MTS-5000 optical modules already in the field
- The only transmission solution that is an integrated tool for testing Gig Ethernet, SONET, SDH, PDH, Fibre Channel, and T-carrier technologies in one 2 inch module.

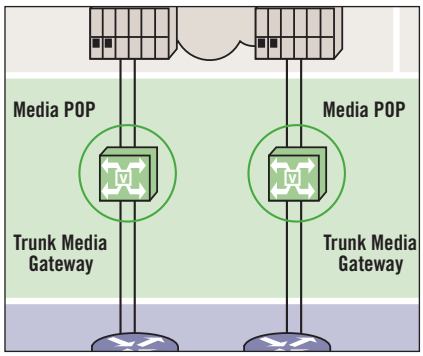
Applications

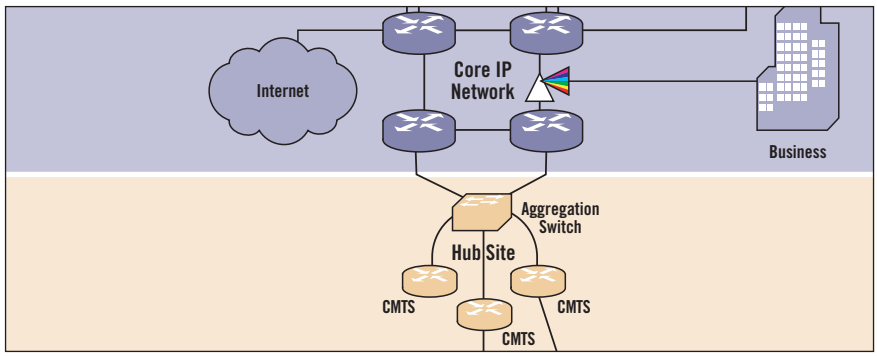
- Reduce test times by up to 66% by testing up to 3 circuits simultaneously and independently
- Perform Fiber characterization on high capacity fiber spans for Polarization and Chromatic dispersion characteristics
- Deploy, verify, and maintain new revenue-generating Ethernet business services by using RFC 2544 and verifying Layers 1, 2, and 3
- Ensure optical connections/connectors with Optical Return Loss (ORL) testing
- Ensure that Network elements and DWDM systems are providing the necessary up time for revenue generating customer services
- Verify the integrity of triple-play services such as video and VoIP by qualifying QoS metrics such as packet jitter and round trip delay
- Deploy Storage Area networks with the Fibre Channel support
- Measure SONET/SDH Rings APS switch times to ensure customer service delivery
- Qualify and troubleshoot Fiber networks with the OTDR and power level test functionality
- Verify DWDM systems with the Optical Spectral Analysis module
- Use the channel isolator option to analyze DWDM/CWDM wavelengths up to 10.7 Gbps

Key Features

- 10GigE LAN/WAN and 1 GigE optical testing for Layer 1, 2, and 3, including RFC 2544
- SONET/SDH BER testing at 51 Mb/s, 155 Mb/s, 622 Mb/s, 2.5 Gb/s and 10 Gb/s
- T-carrier/PDH BER testing at T1, E1, E3, DS3, and E4 rates
- Fibre Channel testing for 1G/2G services
- OTDR and power level testing for fiber qualification
- PMD and spectral attenuation profile testing
- Chromatic Dispersion (CD) testing
- Insertion Loss (IL) and Optical Return Loss (ORL) testing
- Optical Spectrum Analysis (OSA) for all DWDM/CWDM bands
- CWDM/DWDM channel isolator up to 10.7 Gbps wavelength analysis







Optical, Ethernet and, Business Services

Fiber Characterization • CWDM,DWDM,1.5M to 10G SONET/SDH, Ethernet, and 10G LAN/WAN Testing

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T-BERD® 6000/MTS-6000 Compact Optical Test Platform

The industry standard OTDR

This lightweight and compact OTDR is ideal for FTTx applications. Used for the installation and maintenance of both singlemode and multimode fiber, the T-BERD/MTS-6000 allows end-to-end connectivity checks on point-to-point networks and PON, as well as performing in-service maintenance and troubleshooting. Modular in design, the T-BERD/MTS-6000 can be optioned to preform chromatic dispersion, PMD, spectral attenuation, insertion loss, optical return loss, and WDM testing.

Highlights

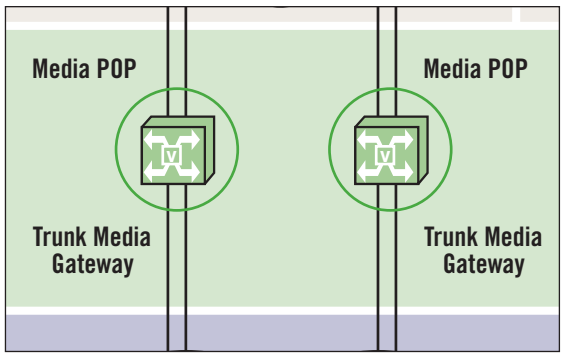
- Compact and lightweight for the field
- Future-proof with over 40 application modules already supported
- Choose from IL/ORL, OTDR, PMD, CD, or WDM plug-in modules
- Application modules compatible with the T-BERD/MTS-8000
- Backwards compatibility with existing MTS-5000 family OTDR modules
- Simple for the novice, fully featured for the expert

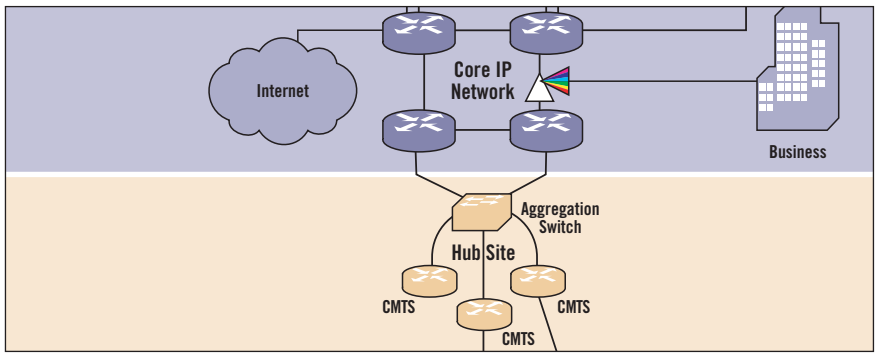
Applications

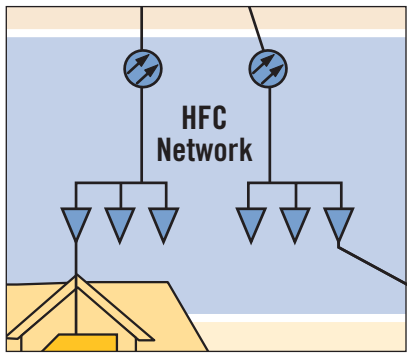
- Fault Location.
- OTDR and power level testing
- CWDM/DWDM testing
- PMD and spectral attenuation profile
- Chromatic Dispersion (CD) testing
- Insertion Loss (IL) and Optical Return Loss (ORL) testing

Key Features

- Lightweight platform: only 2.4kg/5.3 lbs
- Large 8.4 inch transreflective TFT color display improves viewing under any conditions
- Intuitive graphical user interface with touchscreen option
- Extended battery life using smart Lithium ion cell
- Connection checker with VFL, power meter, and Loss Test Set and video inspection scope options
- Built-in optical talkset option for communicating along the fiber
- Unique automatic bi-directional analysis function available to save up to 50% test time for OTDR, IL, and ORL measurements
- Fast data transfer via USB, Ethernet port and 1Gb extended memory option
- Comprehensive suite of PC software tools for post-processing of test results with FiberTrace (OFS-100) and FiberCable (OFS-200)







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Fiber Optic Test Kits Featuring SMART Optical Handhelds

Smart optical handhelds that go beyond the basics

SMART optical handhelds for the installation and maintenance of fiber optic systems and networks support the industry's new technologies including FTTx, 40G, and Gigabit Ethernet. In addition, light sources (OLS-55/56), power meters (OLP- 55/57), variable attenuators (OLA-54/55/55M), loss test sets (OLT-55), return loss meters (ORL-55), and visible fault locators (OVF-1) provide a wide range of test solutions.

Highlights

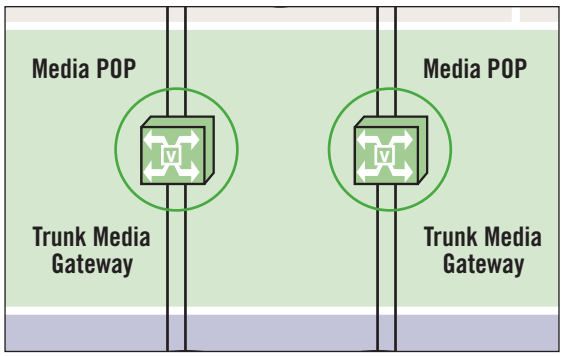
- Up to 900 calibrated wavelengths for the highest performance range in the industry
- Illuminated graphical user interface (GUI) displays all of the parameters and up to three test results simultaneously
- Auto-lambda function provides automatic wavelength detection to speed testing and avoid instrument setting failures
- Universal optical adapter system, including UPP (Universal Push Pull) adapters, ensures adaptation to all of the connectors in the field

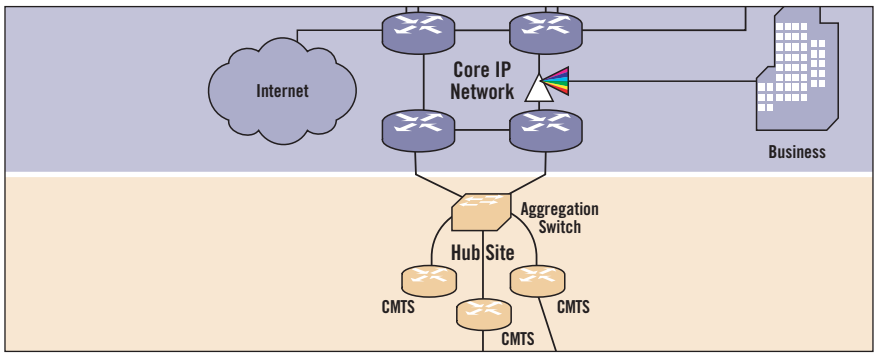
Applications

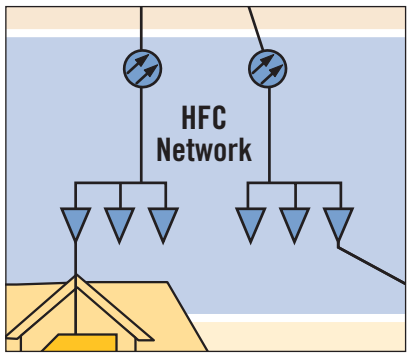
- Testing for all of the industry's newest applications including FTTx/PON, DWDM, CWDM, 40 Gbps, Ethernet, and Gigabit Ethernet.
- OLP-55 SMART Optical Power Meter; a high-performance power meter for installing and maintaining singlemode cables and networks
- OLP-57 SMART Optical Power Meter; a high-performance wavelength-selective power meter dedicated for testing, installing, and maintaining FTTX and BPON/EPON/GPON systems; its through-mode allows simultaneous measurement at 1,490nm and 1,550nm downstream and 1,310nm upstream
- OLS-55 and OLS-56 SMART Optical Laser Sources: offer greater flexibility and higher accuracy for installing and maintaining multimode datacom networks and LANs as well as for maintaining and repairing singlemode fibers in communication, telecommunications, and CATV-multimedia networks
- The OLA-54 and OLA-55 Optical Level Attenuators can be used for testing up to 40 Gbps singlemode systems (OLA-55) and multimode systems (OLA-54) together with bit error rate testing (BERT)
- The OLA-55M Motorized Optical Level Attenuators can be used for simulation of line loss for BER testing and amplifier testing with a power level control for calibration test setups

Key Features

- Adjustable output power level
- Unique power supply management system on the market with 4-way powering
- USB port for remote operation as well as easy report generation and analysis
- Robust, shock-proof, and splash-proof design for field operation
- One-handed operation in the field
- Quick start operation, requiring no warm-up time and reducing testing time
- Illuminated graphical display which shows up to 3 measurements simultaneously
- Large storage capability up to 1,000 results with automatic date/time stamp







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NT-950 Validator™ Network/Cabling Certifier

The Validator uses a four-step methodology—layout, certify, document and archive—for professional and cost-effective installation in the customer's home. The Validator measures and presents fast and clear performance results at up to 1 gigabit to ensure that cabling operates as rated and network components operate at maximum efficiency.

Highlights

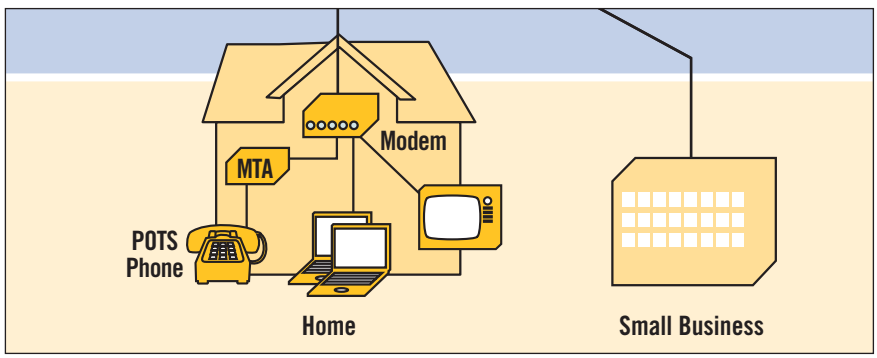
- Certifies CAT5, CAT5E, and CAT6 cables to be IEEE compliant up to 1 gigabit speed
- Tests to TIA 568/570 interconnect standards
- Tests coax, telephone, audio, and security cables

Applications

- Powerful Plan-Um™ software ties together data found in complex voice/data/video installations in printed reports and stores data for future use
- Speed certification assures cabling will do the job it is rated to do
- Layout customer requirements in a matter of minutes, then define cable types and runs

Key Features

- Includes Plan-Um™ Cabling Project Management software
- Creates and prints job reports and cable labels
- Dedicated I/O ports for network, telephone, coax, and paired cables
- Removable 32 MB compact flash memory card included
- Wiremaps new or existing cable systems



Services and Support

Product Support

Extended warranty

Options include extending the standard warranty of a product or purchasing additional coverage for products with expired warranties. Extended warranties for a group of test instruments can be prorated so that warranties will expire at the same time.

Calibration and calibration management

On-site or return-to-factory calibration of instruments provides a convenient, one-stop solution for all calibration and calibration management requirements.

Repair

A group of strategic partners provides repair and repair management services for test equipment and general instrumentation products used to support networks, establishing confidence that all provided services conform to quality and accountability standards.

Asset management

The use of asset management software, RFID, bar-coding, and on-site services makes tracking equipment and managing staff more efficient and effective.

Education services

Education services include a wide array of courses ranging from product training to fundamentals and test applications. Classes guarantee staff will gain job skills and technical knowledge that improve on-the-job performance. Course formats include public training, on-site training, virtual classroom, and self-paced training. Courses can be tailored for your specific requirements.

Custom test systems

Improve your products' time to market by using a custom test system that automates the testing required in your SVT and production environments. Expert test and software engineers perform software and hardware integration necessary to create a solution tailored to your needs. Our engineers are capable of writing software in a variety of programming languages for a variety of platforms and integrate JDSU and non-JDSU equipment.

Technical support

JDSU Technical Assistance Center (TAC)

Americas: 866-228-3762

EMEA +49 7121 86 1345

Worldwide: +1-301-353-1550

tac@jdsu.com

Product Services

JDSU certified equipment program (JDSU ACE)

This program guarantees that used JDSU equipment meets original specifications, allowing ACE products to be purchased with the same confidence as when purchasing new equipment.

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