

PathTrak™ Video Monitoring System

QAM, RF, and MPEG Video Probes and Monitoring Software

Sort by Worst Offenders

5 test points found, displaying all.

RSAM Status	RF (current)	RF (24-hour)	MPEG (current)	MPEG (24-hour)	Test Point
					Broadcast Channels
					VOD Channels
					SDV Channels
					Business Channels
					Government Channels

5 test points found, displaying all.

Export a list of items found: CSV Excel PDF

Key Features

- Monitors and troubleshoots analog and digital video as well as DOCSIS services
- Web-based access to live and historical MPEG and RF measurements
- Simple network management protocol (SNMP) trap forwarding to up to five destinations—sends SNMP traps when alarm state changes
- Monitor MPEG stream errors (TR 101 290 Priority 1, 2, and 3) and drill down to analyze individual program performance
- Easily access performance history (RF, QAM, and MPEG) stored in MySQL relational database

Applications

- Eliminate truck rolls to segment RF and video problems
- Deploy truck rolls to the right place with the right personnel and equipment
- Increase network availability using notification of forward path degradation before service is disrupted
- Intelligently filter alarms based on severity to appropriately alert local operations and NOC personnel

The award winning JDSU PathTrak™ Video Monitoring (PVM) System helps segment video problems in minutes—not hours—by proactively monitoring video, voice over Internet protocol (VoIP), and high-speed data (HSD) carriers for radio frequency (RF) and Moving Picture Experts Group (MPEG) impairments.

The PVM System combines the extensive knowledge of JDSU in both RF and MPEG analysis to quickly identify real customer-affecting issues down to the individual program without having to deploy specialists to remote hub sites. Instead, with the JDSU PVM software, the remote service analyzer module (RSAM) RF and MPEG probes provide remote monitoring and analysis with detailed views of channel performance to the field, headend, and network operations center (NOC) technicians using Windows® Internet Explorer.

Simply viewing the quadrature amplitude modulation (QAM) stack with a spectrum analyzer or measuring and monitoring modulation (MER) and bit error rates (BER) on QAM carriers provides absolutely no insight into MPEG video payloads. It is critical for cable network operators to have system-wide visibility into the underlying content or MPEG protocol layer to ensure the quality of programming content and other MPEG parameters such as PCR jitter (timing) and continuity count for both digital video broadcasting (DVB) and Advanced Television Systems Committee (ATSC).

The JDSU PVM System complements the wealth of existing triple-play monitoring and maintenance solutions, including PathTrak Reverse Path Monitoring, the SDA and DSAM Stealth Sweep System, DTS MPEG analyzers, QT-600 IP probes, MTS Fiber analyzers, and NetComplete™ Service Assurance Solutions.

Learn more about the JDSU PVM solutions at www.jdsu.com/pathtrak.

PathTrak Video Monitoring Solution Components

RSAM-5800 Analog and QAM RF and MPEG Video Probe

- Rack-mounted probe hardware (2 RU) for deployment in hubsites and headends
- Configured by PVM software
- Ethernet connection for communication with the PVM server
- RSAM-5800A for use in systems with 8 MHz channel spacing
- RSAM-5800B for use in systems with 6 MHz channel spacing



ISS-5116 16x1 RF Input Switch

- Rack-mounted 16x1 RF input selector switch (1 RU) (20 MHz to 1 GHz) that adds additional input test points to both RF and MPEG analyzers (JDSU recommends using no more than two of the 16x1 RF input selector switches for optimal speed and performance)

PathTrak Video Monitoring Software

- Web-based access to live and historical displays
- Provides administration of user access privileges for remote users
- Used to configure channel plans and alarm thresholds (Alarm on Critical, Major, Minor, and Warning) for RF and MPEG probes

RF	MPEG	RF Status	MPEG Status	Channel	Label	Description	Freq	Date/Time of Most Recent Event	Message from Most Recent Event
Critical	Critical	Unknown	Critical	105			851.000	2008-Feb-13 12:38:45 EST	Bad MER --(-32.0) dB
Minor	Critical	Minor	Critical	119	new		755.000	2008-Feb-14 22:11:52 EST	Bad MER -24.5(-16.0) dB. Bad MPEG. Bad-BER. Bad PId (programs)
Warning	Critical	Minor	Critical	118	no chan		755.000	2008-Feb-14 20:01:21 EST	Bad MPEG. Bad-BER. Bad PId (programs)
Critical	Critical	OK	Critical	116	no chan		747.000	2008-Feb-13 12:38:45 EST	Bad Level -35.9(-16.0) dB/mV. Bad MER --(-32.0) dB
OK	Critical	OK	Critical	111	CA		717.000	2008-Feb-14 23:00:33 EST	Clear
OK	Critical	OK	OK	110	MPEG/MC		715.000	2008-Feb-14 19:03:52 EST	Clear
OK	Critical	Minor	Critical	109	CA		705.000	2008-Feb-14 23:00:33 EST	Bad MPEG. Bad-BER. Bad PId (programs)
OK	Critical	OK	Critical	108	SpwMPEG		699.000	2008-Feb-13 19:12:52 EST	Clear
OK	Critical	OK	Critical	107	SpwMPEG		693.000	2008-Feb-13 12:38:45 EST	Clear
OK	Critical	Minor	Critical	106	CA		687.000	2008-Feb-14 21:25:28 EST	Bad MPEG. Bad-BER. Bad PId (programs)
OK	Critical	Minor	Critical	105	data		681.000	2008-Feb-14 22:11:52 EST	Bad MPEG. Bad-BER. Bad PId (programs)
OK	Critical	Minor	Critical	104	MPEG/C		675.000	2008-Feb-14 17:02:00 EST	Bad MPEG. Bad-BER. Bad PId (programs)
OK	Critical	Minor	Critical	103	So-DK		669.000	2008-Feb-14 20:05:21 EST	Bad MPEG. Bad-BER. Bad PId (programs)
OK	Critical	Minor	Critical	102	CA		663.000	2008-Feb-14 21:05:08 EST	Bad MPEG. Bad-BER. Bad PId (programs)

PVM System Features

Monitor and Display Channels Used for VoIP, Video, and HSD

- Analog, video, and audio
- Digital video and audio (64 QAM, 256 QAM)
- DOCSIS®
- Single carrier (quadrature phase shift keying [QPSK], coded orthogonal frequency division multiplexing [COFDM], and synchronous code division multiple access [S-CDMA])

Limit Sets for Alarm Management of these Analog and QAM RF Measurement Parameters

- Min/Max single carrier level
- Min/Max analog video level
- Min/Max delta video/audio (dB)
- Audio modulation detection identifies sound drop for analog channels
- Min/Max delta video/second audio (dB)
- Min/Max digital level (used for non-64 QAM or 256 QAM)
- Min/Max 64/256 QAM level
- MER/EVN for 64/256 QAM
- Maximum Pre-FEC BER (64 QAM and 256 QAM w/128, 4 deep Interleave)
- Maximum Post-FEC BER (64 QAM and 256 QAM w/128, 4 deep Interleave)

PVM Software Benefits

Stores Performance History on Individual RF Channels, MPEG Transport Streams, and Individual Video Programs

- Stores performance history measurements in MySQL relational database for up to 60 days
- Generates data trending reports from QAM RF and MPEG measurement data

Increase Workforce Efficiency and Decrease Mean Time to Repair (MTTR) with Web Browser Interface

- Eliminates driving to hubs and headends for routine performance checks
- Troubleshoots problems at remote hubs in minutes instead of hours from the field, headend, or NOC
- Compares field to headend results quickly

Offers Troubleshooting Displays for Quick and Accurate System Performance and Analysis

- Drills down from status displays and views individual RF channels and MPEG programs
- Provides live updates in level, spectrum, constellation, and MPEG modes
- Measures performance history and trending graphs for RF and MPEG

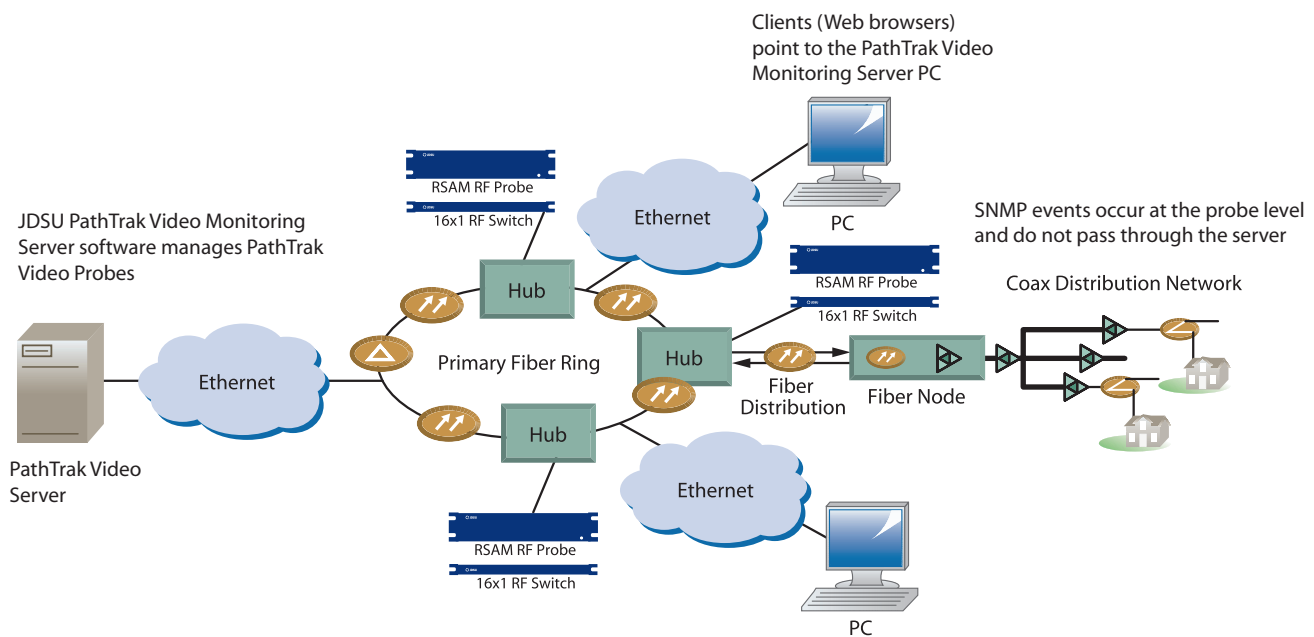


Figure 1: Typical Installation

PathTrak Video Monitoring System

Ordering Information

Model	Part Number	Description
RSAM-5800A	RSAM5800A	Remote Service Analyzer Module—RF Video Probe—Rack-mounted RF/QAM analyzer (8 MHz tuner), including RF monitoring. This unit is field upgradeable to add MPEG.
RSAM-5800B	RSAM5800B	Remote Service Analyzer Module—RF Video Probe—Rack-mounted RF/QAM analyzer (6 MHz tuner), including RF monitoring. This unit is field upgradeable to add MPEG.
RSAM-MPEG	RSAM-MPEG	Factory Installed—Add MPEG capability for RSAM-5800 at time of purchase.
RSAMMPEG-UG-FLD	RSAMMPEG-UG-FLD	Field Upgrade—Add MPEG capability in the field for RSAM-5800, does not include calibration.
ISS-5116	1010-00-0906	16x1 RF Input Selector Switch for RSAM—20 MHz to 1 GHz.
PVM Server Software	PVM-SERVER	PathTrak Video Monitoring (PVM) Server and Client software includes 5 client licenses. Provides Web access for live troubleshooting and displaying performance history.
PVM Client Software	PVM-CLIENT	PathTrak Video Monitoring (PVM) Client software—Supports configuration and access to RSAM-5700 and RSAM-5800 probes.

Hardware Upgrades

RSAM-5600B to RSAM-5700B Factory Upgrade	RSAM5700B-UG-FAC	Upgrade RSAM-5600B to RSAM-5700B for RF monitoring applications, including calibration and deep interleave upgrade.
RSAM-5800A-UPGX	RSAM58ARFUPGX56	Exchange RSAM-5600A for a RSAM-5800A with RF ONLY (without MPEG option).
RSAM-5800B-UPGX	RSAM5800BUPGX57	Exchange RSAM-5700B for a RSAM-5800B with MPEG option.
RSAM-5800A-UPGX	RSAM5800AUPGX56	Exchange RSAM-5600A for a RSAM-5800A with MPEG option.
RSAM-5800B-UPGX	RSAM5800BUPGX56	Exchange RSAM-5600B for a RSAM-5800B with MPEG option.

*Specifications and Ordering Information is subject to change without notice.



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