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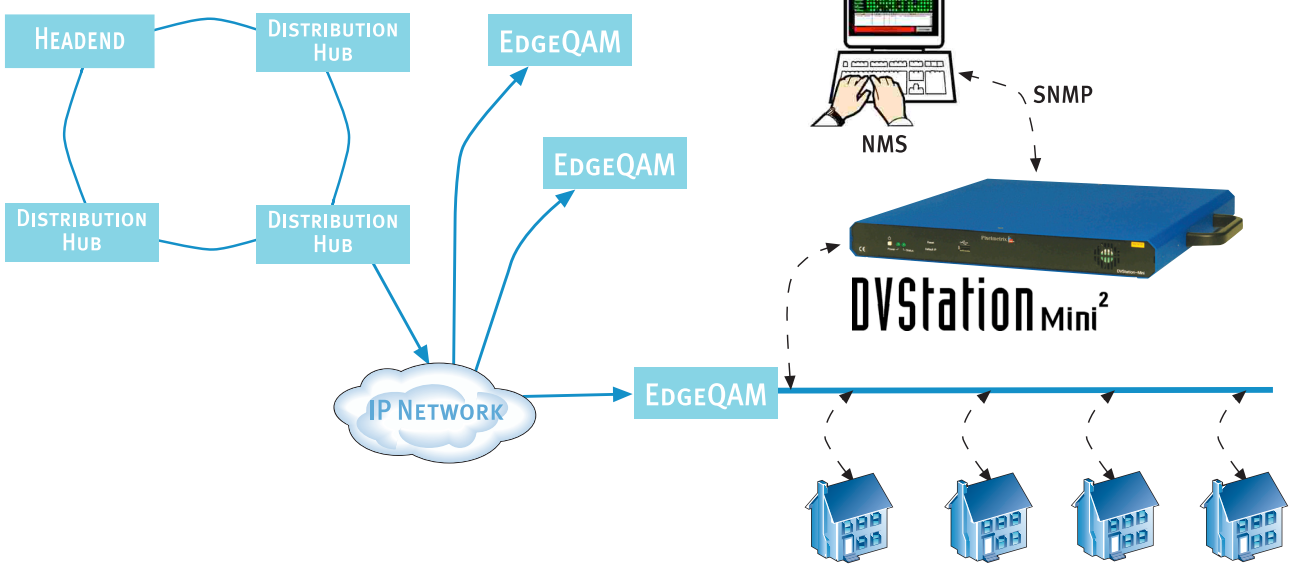
DVStation-Mini² QAM

Overview

Modern cable networks spanning large geographic areas often multiplex local content together with national program feeds to provide greater programming diversity to cater to local interests. This practice can result in a large number of channel line up configurations - eg having different channel numbers for the same movie channel in different cities.

Furthermore, since merging local and national content is usually done at remote, unattended facilities, there is a further risk that mistakes can be made. Effective monitoring is essential to ensure the broadcast stream meets engineering expectations. Embedding a fully featured, remotely controllable MPEG stream analyzer into the network is the best way to resolve problems quickly and avoid expensive truck rolls.

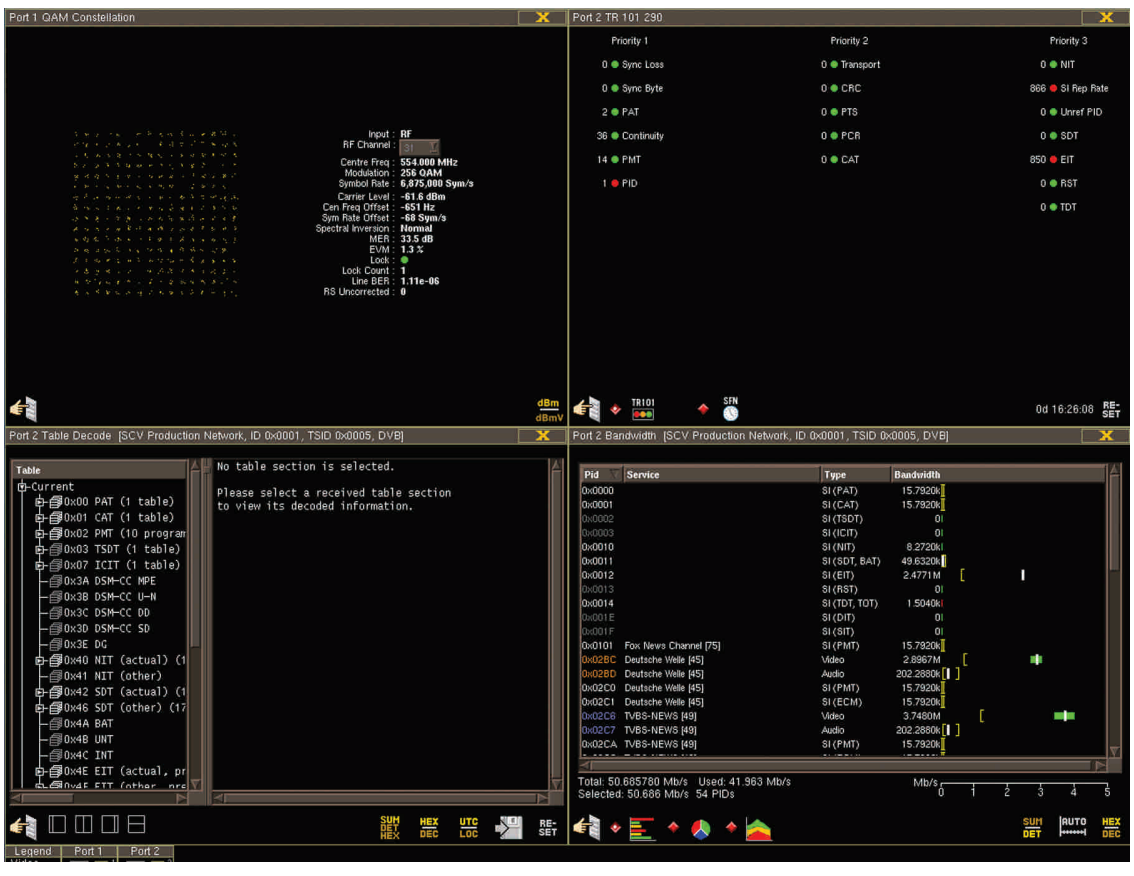


The Pixelmetrix DVStation-Mini² QAM is the ideal preventative monitoring and operational debugging tool. It connects directly to the QAM RF cable network and uses the award winning Pixelmetrix DVStation transport stream analysis technology.

Packaged as a 1RU rack-mount system with power, network and RF input connections all on the back of the unit, it integrates easily even into space-conscious environments. A flexible software-based system built on open standards, the DVStation-Mini² QAM can evolve with the network as digital cable systems move towards technologies such as SDV and beyond.

Key Features

- Monitor EdgeQAM and SDV delivery networks for RF fidelity and TS integrity
- In-depth TS analysis
  - Circular verification of correct service line-up on all RF channels against expectation (On-air Content Validation)
  - Remotely view MPEG-2/MPEG-4 video along with associated audio
  - Capture any segment of the transport stream for later analysis
- In-depth RF analysis of parameters including MER, BER and RS performance
  - DVB-C (EN 300 429), J.83 Annex A, B and C compliance
  - High-resolution constellation display
- Low cost for quantity deployment
- Consolidate alarms to an NMS
- Compact 1RU module with a QAM input and ASI output



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SIGNAL INTEGRITY SERVICE INTEGRITY REMOTE MONITORING

Agile Reconfiguration Capability

The DVStation-Mini^2 QAM can adapt to changing conditions in the operating environment using NIT information and the EIS-MuxConfig interface.

The DVStation-Mini^2 QAM can automatically acquire channel line-up information from the NIT and generate test templates from it.

The DVStation-Mini^2 QAM can also retrieve transport stream configuration information from an EIS-MuxConfig compliant multiplexer for ease of configuration and flexibility.

Automatic alarms on any deviation of content parameters. Unique TS snapshot auto-configuration mechanism.

Standard	RF BW	IF Frequency	Geographhy
J.83 Annex A (DVB-C)	8 MHz	36.125 MHz	Global standard
J.83 Annex B	6 MHz	44.000 MHz	North America
J.83 Annex C	6 MHz	44.000 MHz	Japan

	J.83 Annex A	J.83 Annex B	J.83 Annex C
RF Input			
Connector	BNC		
Input Impendance	75 Ohm		
Frequency	47.0 to 862.0 MHz	54.0 to 858.0 MHz	
Return Loss	13 dB typ. , 10 dB min	12 dB typ. , 9.5 dB min	
Input Power Level	(-)15 to (+)20 dBmV		
Bandwidth	8 MHz	6 MHz	
Noise Factor	7 dB typ.		
SSB Phase Noise	(-)85 dBc/Hz, max @ 10kHz offset		
Image Frequency Rejection	55 dB typ. , 48 dB min	70 dB typ. , 50 dB min	
Power Measurement	(-)75 dBm to (-)25 dBm, <+/-3 dB, +/- 1 dB typ.		
IF Input			
Connector	BNC		
Input Impendance	75/50 Ohm		
Frequency	36.125 MHz		44.0 MHz
Return Loss		>19dB	
Input Power Level	(-)30 to (+)14 dBm	(-)32 dBm to (-)15 dBm	
Bandwidth	8 MHz	6 MHz	
Power Measurement	(-)30 dBm to (-)10 dBm, <+/0.3 dB typ.		

***Input Impedance for IF is a factory option.
**Input Power Level range is based on QEF for QAM-64 @ maximum Symbol Rate

Specifications

Standards
- J.83 A/B/C
- ETSI TR 101 290 (Measurement guidelines for DVB Systems)

Mechanical Characteristics
- 1 RU Portable with handle or 19 inch rack-mountable
- Operating Temperatures
  - +10˚C to +40˚C
- Storage Temperature
  - 0˚C to +50˚C

Electrical Characteristics
- Power Input
  - 90-240 V AC; 43-63 Hz
- Current Requirement
  - 2.5A

Control Interfaces
- HTML Web Browser
- VNC Remote Client

Mass Storage
- 80 GB shock-mounted HDD

System Interfaces
- Management Port
  - 10/100/1000 Base-T
  - RJ-45 Copper Connector
- Serial Port
  - 9-pin DE-9P Connector
- GPI Contacts
  - 4 Contacts
  - 9-pin DE-9P Connector
- USB 1.1a Connector

Network Management
- SNMP MIB for NMS

Distributor Contact

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