EdgeQAM IP/16-48ch™

A High Density 1 RU "Edge QAM" IP to QAM Modulator Gateway with Redundant Power Supplies, Redundant Gigabit (Gig/E) Inputs, and Up to 48 QAM (ITU-T J.83 Annex A/C, Annex B 64/256QAM) Modulators. Sixteen RF Ports on Three Plug-In Modules. Perfect Companion to OnRamp QAM 8Ch/IP™ to Deliver QAM over IP and Reconstruct it Back to QAM at Other End. Will Multiplex IP to Desired QAM Channels...

Features

- Supports re-multiplexing and output in 48-channel QAM or 24-channel OFDM
- Features Pro-MPEG FEC
- Inputs: ASI (four different sources) and GBE IP streams (up to 256 SPTS)
- Input format: SPTS or MPTS, SD or HD
- Outputs: 16, 32, or 48 RF-QAM channels or 24 DVB-T channels for both SD and HD programs
- 1 RU modular system with 16 QAM outputs per module and up to 3 modules (48 channels)
- Supports stream processing including PID remapping and EPG data insertion
- Supports DVB simulcrypt scrambling for up to 4000 H.264 SD programs and output in QAM or AFDM
- Configuration and monitoring programs via NMS, Web GUI, or SNMP
- IP Management: IGMPv1, IGMPv2, IGMPv3
- Protocols: Unicast or Multicast
- Supports up to 48 QAM-RF channels from 48 to 862 MHz organized as 3 independent groups of 16 channels
- QAM support for ITU-T J.83 Annex A/C, Annex B (64/256QAM)
- Power consumption approximately 100 watts

Applications

- Cable systems
- VOD
- Schools and hotels

Overview

QAM is the RF modulation format used for cable in the U.S. This modulation format is designated by the ITU organization.

Gigabit Ethernet, on the other hand, is now the defacto transport mechanism for delivering video content inside most head ends, even though DVB-ASI still has a role. For this reason it makes sense that newer QAM modulators support IP input.

"Edge QAMs" were designed to provide high density QAM modulators with IP inputs. DVEO's new EdgeQAM IP/16-48ch™ has up to 48 QAM modulators that receive single or multiple program IP transport streams and convert them to QAM.

It is designed to deliver cost effective solutions for both small and large cable operators who are starting to migrate to IP infrastructure.

DVEO
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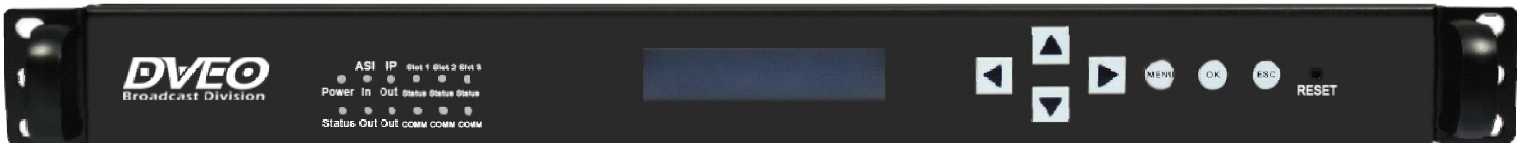
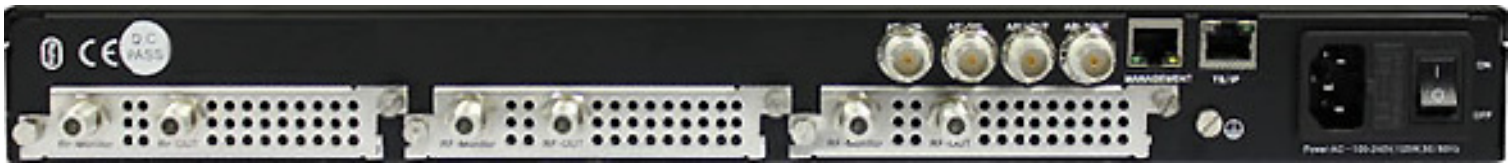
EdgeQAM IP/16-48ch™

Panel Controls



Front



Rear

Specifications

QAM RF Outputs

Physical Outputs:	Three connectors for 8XRF
Output Frequency Range:	48 -862 MHz
Output Frequency Step Size:	50 KHz
RF Channel:	16 to 48 channels (6/7/8 MHz)
QAM Modulation Mode	16/32/64/128/256 QAM
QAM Type:	ITU-T J.83 Annex A/ C, Annex B (64/256 QAM)
Symbol Rate:	1.0~6.9 MBauds
Output Levels:	Effective, per channel: 90~115 dBuV Combined, 49 channels: 90~106 dBuV
MER:	≥40dB (Equalized)
BER:	≤5×10-9 (64 QAM, 6.875 Msps)

DVB-T Output (optional)

Physical Outputs:	Three connectors for 4XRF
Output Frequency Range:	50-858 MHz
Output Frequency Step Size:	50 KHz
Transmission Modes:	2K, 8K
Guard Intervals:	1/4, 1/8, 1/16 and 1/32
Constellations:	QPSK, 16 QAM, 64 QAM
FEC:	1/2, 2/3, 3/4, 5/6, 7/8
Output Levels:	Effective, per channel: 90~115 dBuV Combined, 4 channels: 90~112 dBuV

IP Input

Interface:	1 x 1000 Mbps per port
IP Encapsulation:	MPEG TS over UDP/RTP
MPEG TS:	MPTS and SPTS
I/O Processing:	Up to 12 channels (MPTS), 64 channels (SPTS) max at 72 Mbps per channel
Addressing:	Unicast and Multicast
Management:	IGMPv1, IGMPv2, IGMPv3
FEC:	Pro-MPEG

DVB-ASI Inputs

Interface:	4 BNC connectors (2 ASI inputs and 2 ASI outputs), 75Ωz
MPEG Format:	188/204Bytes per TS
I/O Processing:	1 MPTS/SPTS per port, up to 120 Mbps per port

Re-multiplexing

PID	Re-mapping and Filtering
MPTS Output Synchronization	Routing: Any Input to Any Output Redundancy: Input Service Redundancy & IP Port Redundancy

DVB Scrambling

TS Streams:	Up to 48 TS streams (maximum 72 Mbps per TS)
Support DVB Simulcrypt:	Maximum 4 CAS simultaneously
CAS Support:	Irdeto, Conax, Viaccess, Nagravision, Verimatrix, Novel-Super TV, CTI Dvcrypt and other DVB-simulcrypt CAS
Scrambling Level:	Program or PID

Management

Interface:	100 Base-TX, RJ45
NMS:	Digital Service Manager
Web-based Management:	Yes
Support SNMP:	Yes

Physical

Input Voltage:	90 – 260 VAC
Power Consumption:	Approximately 100 Watts
Dimensions (WxHxD):	19 x 1.75 x 17.3 inches (1 RU) 480 x 44 x 440 millimeters
Operating Temperature:	0 to 50°C
Storage Temperature:	-40 to 65°C
Relative Operating Humidity:	<95%
MTBF:	>150,000 hours
Conformities:	FCC, CE, RoHS

Ordering Info

EdgeQAM IP/16-48ch
EdgeQAM IP/32ch
EdgeQAM IP/48ch

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