



IPQC GbE IP-Input Mux Scrambler Edge QAM

DESCRIPTION

The IPQC is a highly integrated 1RU video edgeQAM which can multiplex and scramble IP video signals and convert them to QAM/DVB-C channels for use in CATV systems including the Pico Digital Condor CATV system.

The IPQC has a flexible design allowing various applications. For a DVB-C/QAM/Condor CATV system, it can take 36 single program transport streams (SPTS) via the Gigabit Ethernet port and combines these with external DVB-SI streams to create a full DVB-C compliant network with up to 12 QAM channels of either Annex A or Annex B. Each of these services can be scrambled using the DVB-CSA through the standard SymulCrypt interface with a conditional access server.

The high quality QAM output of the edgeQAM is organized into 3 independent blocks of 4 contiguous channels which can be placed anywhere in the extended CATV range of 50MHz to 1002MHz.

FEATURES

Input

- 2x Gigabit Ethernet and one 10/100 Management interface
- Up to 36 Input Single Program MPEG-TS streams (SPTS) or 12 Multiple Program MPEG-TS streams (MPTS)
- Support for both multicast and unicast IP stream

Processing

- Automatic MPEG-PCR re-generation for all SPTS
- PID re-mapping for conflict avoidance
- TSID / Program number configuration for PAT/PMT generation
- Bypass for external DVB-SI stream inclusion (takes one service per QAM channel)
- Password protected simple web interface for easy configuration and monitoring
- Front Panel IP configuration and fault reporting for easy configuration and maintenance
- Supports DHCP for automatic IP address acquisition
- Supports DVB-SDT [actual] local generation when there is no external DVB-SI streamer

Outputs

- 12x high quality QAM channels in Annex A/B (ITU-A, ITU-B)
- 3x independently tunable blocks of 4 contiguous QAM channels
- 50MHz to 1002MHz frequency range
- 6MHz or 8MHz channel size



(Back Panel)

SPECIFICATIONS

GbE INPUTS

Input Connector	2x RJ-45
Ethernet	GbE (1000Base-T)
Addressing/Protocols	Unicast, Multicast
MPEG Transport	IPv4 Encapsulated 13818-1 SPTS or MPTS pass-through

ETHERNET COMMUNICATION MANAGEMENT PORT

Input Connector Type	1x RJ-45
Ethernet	10/100 Base-T
Protocol	Web(HTTP)

QAM-RF OUTPUTS

Output Frequency Range	50-1002 MHz
RF Channels	Twelve (6 or 8 MHz)
QAM Modulation Modes	16, 32, 64, 128, 256
QAM Types	ITU-A (DISH/DVB), ITU-B (USA/DCII)
QAM Symbol Rates	2.24~2.98, 4.85 to 7.0 Msps
PCR Re-Stamping	Auto
Output Level (combined, 12 channels)	>32 dBmV
Output Attenuation	0-10 dB (0.5 dB step)
Output Level Flatness (50-1002MHz)	±0.75 dB
Spurious	> 60 dBc
Output Connector	1 x 75Ω, F-Female
Output Return Loss	>15 dB

INTERNAL AC POWER SUPPLY

Line Voltage	93-254 VAC, 47-63 Hz
Power Consumption	40 W

EXTERNAL DC POWER BACKUP

Voltage	12VDC±5% VAC
Current	<6 A

GENERAL

Dimensions	19”(L) x 17.5”(D) x 1.75” (H)
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ORDERING INFORMATION

IPQC	GbE IP-Input Mux Scrambler Edge QAM
CASSW	Conditional Access System (Hollywood Approved)
PDCS	CAS Server (Hollywood Approved)
X-PS	External Redundant Power Supply