



IPQC32

32 Channel Mux Scrambler EdgeQAM



Description

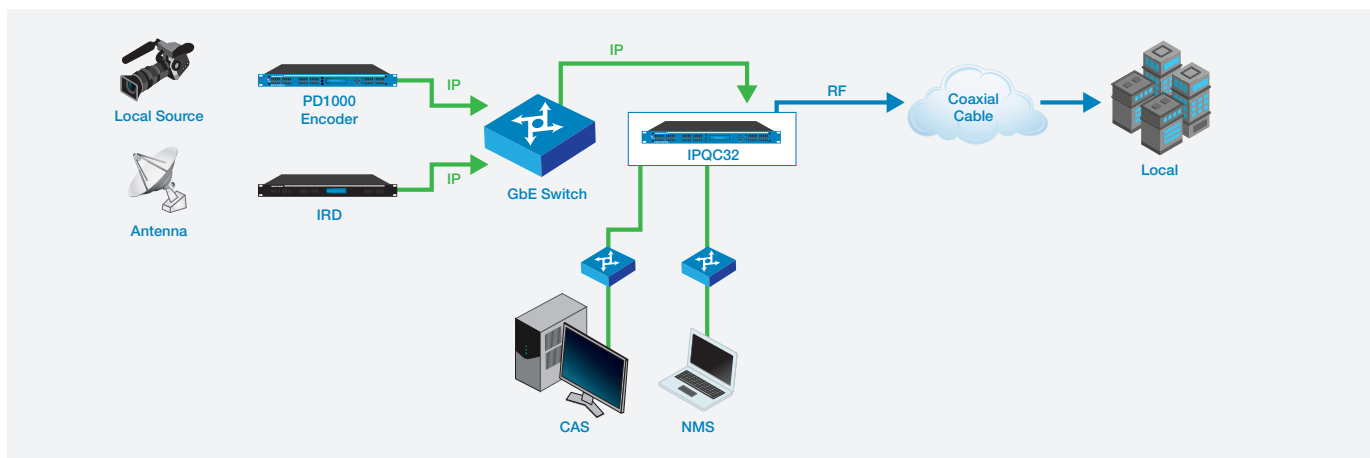
The IPQC32 is a highly integrated 1-RU video edge QAM that can multiplex and scramble IP video signals and convert them to QAM/DVB-C channels for use in CATV systems, such as the Pico Digital CONDOR. The unit features a flexible design and can be configured in a number of ways to suit specific end applications. The high-quality QAM output of the edge QAM is organized into 32 independent QAM channels, which can be placed anywhere within a 768-MHz span, from 36 MHz to 960 MHz. The IPQC32 supports up to four simultaneous CA systems and 1680 Mbps of IP data input.

Features

- Supports up to 1024 channels of IP input over UDP, RTP (MPTS/SPTS)
- Supports unicast and multicast, IGMP v2/v3
- Max 840-Mbps effective bitrate for every GbE input
- Supports re-multiplexing and MPTS/SPTS multiplexing
- Supports up to 180 PIDs remapping per channel
- 32 QAM carrier outputs, adjustable frequency output within 768 MHz
- Supports RS (204, 188) encoding
- Excellent RF performance, MER \geq 40 dB
- Remote control and monitoring via an easy-to-use Web browser
- Modular design, 1-RU chassis
- Simultaneous multiple encryption: four CA systems supported
- Compliant to DVB-C (EN 300 429) and ITU-T J.83 Annex A and B
- Supports DVB general scrambling system (ETR289), Simulcrypt standards ETSI 101 197 and ETSI 103 197
- 2 GbE inputs, RJ-45 interface or SFP

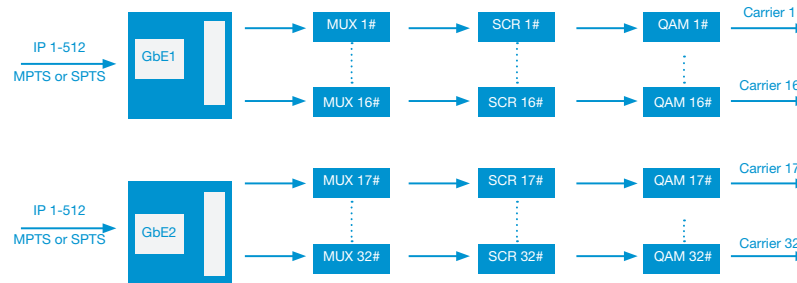


Sample System Configuration

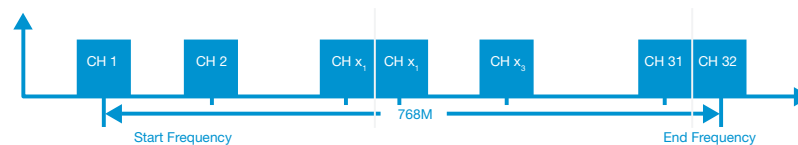


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System Diagram



Carrier Setting Illustration



Specification

Input

Interface	2 GbE (RJ-45) or 2 SFP input ports, hot backup
IP Input	512 x 2 = 1024
Transport Protocol	TS over UDP/RTP, unicast and multicast, IGMP V2/V3
Transmission Rate	Max 840 Mbps effective bitrate for every GE input

Multiplexer

Input Channels	1024
Output Channels	32
Max PIDs	180 / channel
Functions	PID remapping (auto/manually optional) PSI / SI table automatically generating Note: No EAS Support

Scrambling

Simultaneous Encryption	Four different CA systems
Scramble Standard	ETSI 101 197, ETSI 103 197
Connection	Local/remote

QAM Modulation

QAM Channel	32 non-adjacent carriers	
Modulation Standard	EN300 429/ITU -T J.83 Annex A and B	
DVB-C	J.83A	Constellation:16/32/64/128/256 QAM Bandwidth: 8 M
	J.83B	Constellation:64 QAM / 256 QAM Bandwidth: 6 M
Symbol Rate	5750 Ksps to 7200 Ksps	
Constellation	16, 32, 64, 128, 256 QAM	
FEC	RS (204, 188)	

RF Output

Interface	1 F-type output port for 32 carriers, 75 Ω
Frequency Range	36 MHz to 960 MHz, 1 kHz steps
Output Level (Combined)	59 dBmV, .5 dB steps
RF Level Adjustment Range (Combined)	39 dBmV to 59 dBmV
MER	≥ 40 dB

Management

Connection	RJ-45, GbE, full duplex, auto-neg
Protocols	HTTP
User Interface	Web browser
Browser Support	IE9 or later, Firefox, and Chrome

General

Dimensions	19" (L) x 18.5" (D) x 1.75" (H)
Weight	19.8 lbs.
Operating Temperature	0 °C to 45 °C
Power Supply	100 VAC ± 10 %, 50 Hz / 60 Hz 240 VAC ± 10 %, 50 Hz / 60 Hz

Ordering Information

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