Multifunctional DVB-C Modulator

GQ-3680Q

Q-3680Q is a new generation of multi-function modular IPQAM modulator from Gauss Bell. It can receive MPEG / II transport stream encapsulated by UDP / RTP with multiple IP input, and multiplex, scramble and insert local information. , And then perform QAM modulation, and finally output the RF signal.

GQ-3680Q can be applied to the front-end of cable digital television stations, sub-front-end computer rooms, or editing and broadcasting centers. A single device can meet the diverse information processing needs of customers; it can also be used as an edge IPQAM modulator under the VOD system architecture.

Front panel :

Rear panel :

Main Features

- Modular card design, easy to upgrade and maintain
- With GbE Gigabit Ethernet input and loop-out, single interface up to 960Mbps data throughput
- Support UDP, RTP, IGMP and other data transmission protocols
- Supports management and control using HTTP, SNMP and other protocols
- With 1 + 1 optical interface (or electrical interface) redundant backup to ensure high reliability of data reception
- With high integration, stand-alone 1RU achieves 16, 32, and 48 frequency points of RF radio frequency signal output
- Comply with ITU-T J.83 Annex A, B international standards, compatible with DVB-C standards
- Each frequency point can reuse up to 64 sets of programs, each program has 16 PID processing capabilities
- Compatible with DWDM fiber network, optional single-mode / multi-mode optical receiving
- Support TS over IP, multiplexing, scrambling, PSI / SI processing, modulation and up-conversion
- Supports up to 4 CAs with the same secret, session and non-session (fixed key) information encryption
- Support 16/32/64/128/256 and other QAM modulation modes
- Support full-band agility, output signal frequency range is 30 ~ 860MHz

- Support MPTS, provide broadcast services required
- Support VOD functions such as UDP port mapping, PID mapping, and automatic generation of multiplexed stream basic tables
- Supports automatic or manual port mapping
- With powerful background configuration function and network management monitoring system to ensure high stability of equipment operation
- With excellent RF index, to ensure the high reliability and scalability of the network
- Support dual power backup to ensure high security of equipment operation
- Centralized SNMP network management system for remote or local network monitoring
- Support remote online upgrade

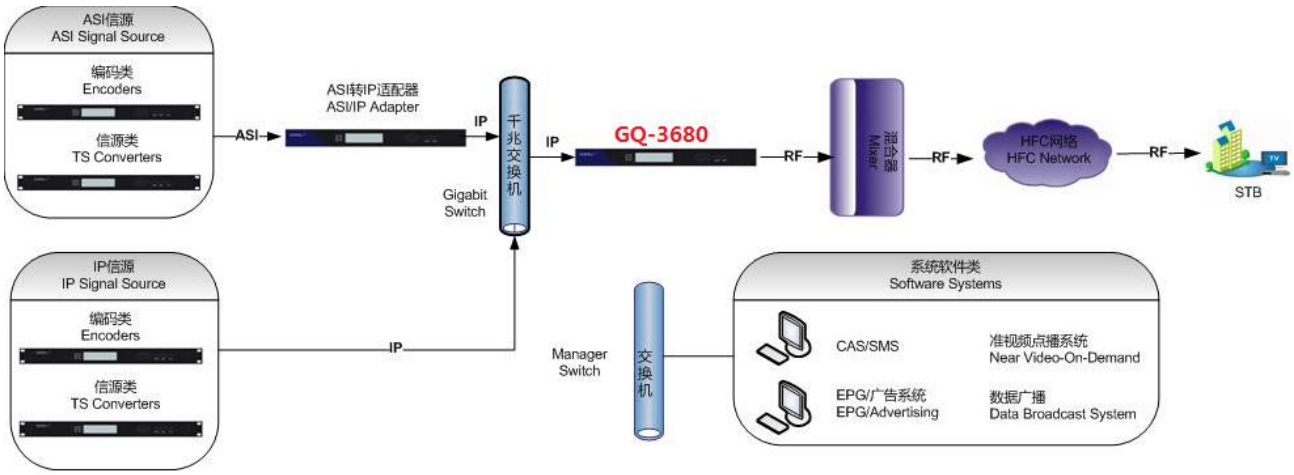
Technical Specifications

Multiplexing Scrambling	
multiplexing	PSI / SI tables support automatic generation or manual insertion
	Support intelligent program search
	Maximum multiplex programs: 1024
Scrambling	Support program-level scrambling
	Supports session or non-session encryption
	Support 4 CASs
EMM bandwidth	Maximum number of scrambled programs: 1024
Bit rate statistics	Maximum bandwidth 3Mbps
Management	
Physical interface type	Ethernet 10/100 Base-T
port	RJ-45
protocol	TCP/IP, SNMP
Power consumption	
Input voltage range	100 ~ 240V AC
Input frequency range	50/60Hz
Power consumption	<100W
Environment	
range of working temperature	5℃ ~ 45℃
Storage temperature range	-25℃ ~ 85℃
Ambient humidity range	10% ~ 90%
Physical index	
Size (W x H x L)	483mm x 44mm x 450mm
Total Weight	<6 Kg

IP Interface	
Physical interface type	RJ45-Gigabit Ethernet
Physical bandwidth	1000Mbps
Number of interfaces	0-2, can be configured as input or output *
Protocol	UDP
SFP Interface	
Physical interface type	SFP
Physical bandwidth	1000Mbps
Number of interfaces	0-2, can be configured as input or output *
RF Output	
Physical interface type	F-Female [Imperial female]
impedance	75
Channel mode	ITU-T J.83 Annex A / B
Number of interfaces	2
Symbol rate	4.2 ~ 7Mbaud / s
Constellation mode	16/32/64/128/256 QAM
Output frequency	30 ~ 860MHz
Output level	98dBuV ~ 118dBμV
Gain trim	-2.5 ~ 10.5dB in steps of 0.25dB
MER	≥ 45dB (on equalization)
Isolation	≥ 75dB
Return Loss	≥ 14dB

Typical Application

Broadcasting



VOD