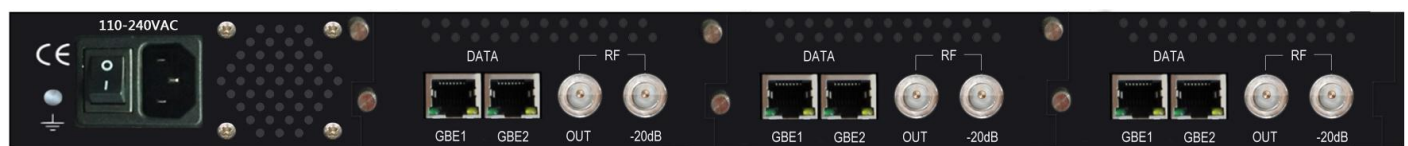# Multifunctional DVB-C Modulator

GQ-3680N

This device is a new generation of multi-function modulator (DVB-C). A single IP / modulation board has 2 IP inputs, multiplexing, scrambling and multi-channel modulation functions. The device supports up to 3 boards and 72 frequency points. Modulation. This device adopts "module management function", which can well meet the current and future digital TV system requirements of customers. In terms of management and maintenance, it supports Web-based management.

Front panel：

Rear panel：

Main Features

- Support ITU-T J.83 Annex A / C modulation, output frequency range: 48MHz ~ 866MHz
- QAM mode can work in 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
- Support up to 4 CASs with the same secret and DVB-CSA scrambling
- The reuse part supports automatic generation and manual upload of SI / PSI information;
- The network parameters of data input and output can be flexibly configured, and the input code stream can be automatically detected
- The IP interface supports bursts and uniform input streams, and performs uniform code reformulation on the streams to improve the output stream efficiency
- Single board card with 24 adjacent frequency outputs, the channel is equipped with selective output switch
- Bit rate range of output data: single channel 15.5 ～ 51.6Mbps
- RF single channel output data symbol rate range: 2.2 ～ 7Mbaud / s
- Output level range: 87dBuV ～ 105dBuV (24 channels, 0.25dB step)
- The channel is equipped with a gain fine adjustment function, which can equalize the in-band level, and the level adjustment range is 0 ~ 18dB
- Support import and export of equipment working parameters
- Support web network management, all main control software support remote online upgrade

Technical Specifications

IP Input

Number	2*3
Type	RJ45
Data format	TS OVER IP(UDP) Byte packet
MAC	IEEE 802.3 1000BASET
Single input bit rate	0~800Mbps

RF Output

Number	2 * 3 (one main road, one road monitoring)
Type	Block F (Imperial), 75Ω
RF Frequency	48MHz ~ 866MHz
RF Level	87-105dBuV (24 channels, 0.25dB step)
Modulation error rate（MER）	≥40dB (QAM mode: 64 / 256QAM symbol rate: 6.857MBaud)
SNR（Out of band）	> 50dB

Streaming multiplexing

Stream input	Input TS stream number, 0 ~ 500 (single sub-module): The total number of input programs, 0 ~ 512; Single TS includes program number, 0 ~ 64
Stream output	Output TS stream number, 0 ~ 24; Total number of output programs, 0 ~ 512 Single output TS includes the number of programs, 0 ~ 64
Output stream PSI information	Standard, ISO / IEC 13818-1, DVB SI (ESI EN300468); Form type, PAT / PMT is automatically regenerated

	SDT can automatically generate or forward manually uploaded segmented files NIT / BAT can forward manually uploaded segmented files Whether TDT / TOT is automatically generated

Streaming scrambling and CAS interface

Scrambling algorithm	DVB-CSA
Number of built-in scramblers	4
Form update management	CAT、PMT
Type	RJ-45 10/100 Base-T
Number	1

Power consumption

nput voltage range	110 - 240V AC
Input frequency range	50/60Hz
Power consumption	≤90W

Working environment

range of working temperature	0℃ - 45℃
Storage temperature range	-20℃ - 80℃
Ambient humidity range	10% - 90%，Non-condensing

Physical index

Size (W x H x D)	483mm×44.5mm×450mm
Weight	≤6.0kg

Typical Application