

WQM-860SL

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WQM-860SL QAM Modulator



► Overview

The WQM-860SL is a professional quality, digital headend component providing QAM TS and RF upconversion functions in a single module.

The QAM modulator then applies cable environment FEC to the transport stream and remodulates using QAM modulation to an IF QAM signal.

In RF upconverter, the IF QAM signal is SAW filtered and then upconverted to the desired output channel. Any standard CATV output channel may be selected in the range of 54 to 860 MHz. Bandpass flatness and phase noise are closely controlled in the WQM860 to ensure a high MER output signal. This ensures that the Qam modulator will not introduce a source of errors into the distribution process. Because the MPEG2 transport stream information is not modified by the QAM modulator, all encryption, authorization, and program guide information are passed on to the CATV set top box, without any changes.

► Features

- ▲ Operates in DVB.
- ▲ ASI signal input and a digital QAM signal output in 16/32/64/128 or 256 QAM mode.
- ▲ Front panel LCD for monitoring, data display and setup.
- ▲ High MER (Modulation Error Rate) ensures a low bit error rate.
- ▲ Switching power supply 90VAC-260VAC, 50Hz/60Hz.
- ▲ Standard 19' rack-mount for installation.
- ▲ SAW filtered IF out/in loop.
- ▲ RF modulation output
 - 47-862MHz output frequency agility.
 - 60dBmV output level with Hybrid module IC.
 - Output level adjustable by a 15dB range.
 - Low out-of-band noise and High VSB attenuation.
 - Double PLL synthesized channel control.
- ▲ Available to control multiple and daisy chain QAM modulators with our Monitoring & Control Software.

► Technical Specifications

▲ DVB ASI-C INPUT

Connection medium	Coaxial cable
Connector type	BNC 75 ohms
Cable length	300 meters
Link character length	10 bit

Bit rate on link	270 M bit/s
Byte rate on link	27 M bytes/s
Useful data rate	0.1 M bits/s to 54 M bit/s
Max. Input Voltage	880 mV p-p
Data packet length	188 bytes or 204 bytes
Maximum MPEG-2 bit rate	213 M bits/s

▲ QAM MODULATION

Modulation Mode	QAM - 16, 32, 64, 128, 256
Bit Rate	54 M bit/s
Symbol Rate	1~6.95 Msps
Roll Off	15%
Phase Noise	-91dBc @10KHz
MER	37 dB Typical
SNR	40 dB Typical
Carrier Suppression	53 dB Typical
FEC	Reed Solomon (204, 188, T=8) code
Full Compliance	with DVB-C ETSI/EN300 429
ITU-T J.83 Annex	A(ie.DVB)

▲ RF OUTPUT

Frequency Range	47MHz to 862MHz
Bandwidth	8MHz [PAL-D/K]
Output Level	≥ 60dB mV
Spurious and Harmonics	≥ 55dBc
Output Impedance	75 Ω
Frequency Accuracy/Stability	± 5 KHz
Connector	F-type

▲ CONTROL INTERFACE

Electrical Interface	RS -232C
Data Link	57600bps, No parity, 8-bit data, 1 stop bit
Connector Type	DB-9 Female for connection to next station

▲ GENERAL

Operating Temperature Range	0 - 50 °C
Power Requirement	90 ~ 260 VAC, 50/60 Hz.
Real size of the unit	482(W) x 283 (D) x 44 (H) mm.
Dimensions	608(W) x 328 (D) x 84(H) mm.
Packing	1 set/Inner box, Gross Weight: 3Kgs. 5 PCs/ Carton / 16Kgs/ 625 (W) x 348 (D) x 456 (H) mm /
Measurement	578(L)x375(W)x72(H)mm
Gross Weight	3Kgs.