

AQM

Agile QAM Modulator 1x ASI ► 1x QAM

AQM (Agile QAM Modulator) accepts one MPEG-2 digital transport stream encapsulated in an ASI (Asynchronous Serial Interface) format, and delivers one output in QAM format in the 5.75-864 MHz range.



Features

- Input standard supported is ASI with data stream not to exceed 270 Mbps
- Output standards supported are ITU-T J.83 Annex A and Annex B (QAM 16, 32,64, 128, 256, 512, and 1024)
- Optional IF output (Intermediate Frequency) and LVDS input (Low-Voltage Differential Signal) is available
- Compact design allows for deployment of six modules in 2RU rack space

Ordering Information

Model	Stock #	Description
AQM	6271B	Agile QAM Modulator
MIRC-12V	7715	Rack Chassis (holds up to 6 AQM modules)
MIPS-12C	7722C	110 VAC/60 Hz power supply (oner per chassis)
MIPS-12C PAL	B7722C	220 VAC/50 Hz power supply (oner per chassis)



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Specifications

INPUT

Connector:	BNC Female
Standard:	DVB-ASI; EN 50083-9
Transport Rate:	270 Mbps
Impedance:	75 Ω

OUTPUT

Connector:	"F" Female
QAM Modulation Modes:	16, 32, 64, 128, 256, 512, and 1024
DVB Symbol Rate:	Variable; 1 to 10 MSymbols/sec (MBaud)
Frequency Range:	5.75 to 864 MHz
QAM Tuning:	
NTSC:	Per channel's number from 2 to 135 & T7 to T14
PAL:	Per channel's center-frequency (12.5 kHz increments)
RF Level:	+40 dBmV (100 dBμV)
RF Level LCD Screen Error:	±2 dB
RF Level Adjustment Range:	30 to 40 dBmV
Frequency Tolerance:	±0.5 kHz @ 77°F (25°C)
Frequency Stability:	±5 kHz over 32 to 122°F (25°C)
Amplitude Flatness:	±0.25 dB (over 6 MHz channel)
Phase Noise:	-98 dBc (@ 10 kHz)
Spurious:	-60 dBc
Broadband Noise:	-75 dBc (@ +40 dBmV output level, 4 MHz bandwidth)
Impedance:	75 Ω
Return Loss:	12 dB
Spectral Inversion:	Auto Recognition
Carrier Suppression:	55 dB
SNR:	Greater than 40 dB
MER:	Greater than 40 dB
I/Q Phase Error:	Less than 1 degree
I/Q Amplitude Imbalance:	Less than 1%

GENERAL

Dimensions (W x D x H)	
AQM Module:	2.3 x 7.5 x 3.5 inches (58 x 191 x 89 mm)
Power Supply:	4.6 x 7.5 x 3.5 inches (106 x 191 x 89 mm)
Rack Chassis:	19.0 x 12.0 x 3.5 inches (483 x 305 x 89 mm)
Power	
MIPS-12C:	110 VAC/60 Hz
MIPS-12C PAL:	220 VAC/50 Hz
Power Dissipation:	5 W (per AQM module)
Weight	
AQM Module:	2.3 lbs (1.04 kg)
Fully Loaded Chassis:	24.2 lbs (10.9 kg)
Operating Temperature:	32 to 122°F (0 to 50°C)
Storage Temperature:	-13 to 158°F (-25 to 70°C)
Operating Humidity:	0 to 95% RH @ 35°C max, non-condensation
Storage Humidity:	0 to 95% RH @ 35°C max, non-condensation

ALARMS / MONITORING / CONTROL

Local Monitoring:	Front-panel 16-character, 2-line LCD screen
Local Control:	Front-panel Navigational Key-pad
Remote Monitoring/Control:	Not Available