Digital Headend/CATV

SQT Series QPSK/8PSK Transmodulator

- Tunes and demodulates QPSK/8PSK satellite signals in DVB-S, DVB-S2 modulation including DCII FEC used by HITS and others
- Outputs 4 or 8 transponders of SD or HD video in 4 or 8 QAM-RF channels
- Supports user selection of programs to drop, to reduce stream rate to allow new DVB-S2 high rate transponders to be carried in 256 QAM-RF channels
- Superior QAM performance with unequalized MER at 39dB, high output levels, and return loss >15dB
- Internal web server allows any PC to access web pages for easy configuration and simple local or remote operation
- Dense with up to 8 channels in 1RU, low power for low heat and long life
- ASI input for local content (may be substituted for a satellite signal, 1 in SQT-400, 2 in SQT-800)

Specifications

SATELLITE INPUTS (FROM LNB)	
Frequency Range	950-2150 MHz
Modulation Rates	
DVB-S	1 to 45 Msps
	1/2, 2/3, 3/4, 5/6, 7/8
DVB-S2	5-33 Msps
	QPSK: 1/2/, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
	8PSK: 3/5,2/3, ¾, 5/6, 8/9,9/10
DCII	1 – 30 Msps
	5/11, ½, 3/5, 2/3, 3/4, 4/5, 5/6, 7/9
Input Level per Carrier	–20 to –65 dBm
Acquisition Range	±5 MHz
Tuner Step Size	100 kHz
Return Loss	>9 dB
Impedance	75Ω
Connector	F-Female
LNB Power and Control Output	11.5 to 14.0,
	16.0 to 19.0 volts, or Off / Blocked and 22kHz / Off

ASI INPUTS	
Connector	1xBNC (SQT400), 2xBNC (SQT800)

QAM-RF OUTPUTS	
Output Frequency	50-1002 MHz
Channel Bandwidth	Four channels, 6 to 8 MHz
QAM Modulation Modes	16, 32, 64,128, 256
QAM Types	ITU-A (DVB), ITU-B (DCII)
QAM Symbol Rate	2.24~2.98, 4.48~7.0 Msps
PCR Re-Stamping	Auto
Channel Plans	EIA, HRC, IRC, Manual
OutputFrequency Step Size	>10 Hz
Baud Rate Step Size	<1 Hz

OUTPUT LEVEL	
(Effective, per Channel)	>45 dBmV
(Combined, 4 Channels)	>38 dBmV
Output Attenuation	0-10 dB (0.5 dB step)
Output Level Flatness (50-1002 MHz)	±0.75 dB
Spurious	> 60 dBc
Output Impedance	75Ω
Output Return Loss	>15 dB
Output Connector	F Female

GENERAL	
Ethernet	10/100BaseT
Ethernet Connector (1)	RJ-45
Dimensions	19" (W) x 19" (D) x 1.75" (H)
Operating Temperature	0-40C (32-104F)
Operating Humidity	5-100% (non-condensing)

POWER	
AC Input	93-254 VAC, 47-63Hz
AC Power (4 QAM Outputs)	22W
(8 QAM Outputs)	44W
DC Input (varies with LNBs)	12V±5%, 4-8A

Ordering Information

SQT400	QPSK/8PSK Transmodulator - 4 Channels
SQT800	QPSK/8PSK Transmodulator - 8 Channels
X-PS	External Redundant Power Supply

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