

Professional Headend Solutions

STC 096 DVB-S2 & DC II TWIN 8PSK/QPSK to QAM TRANSCODER

The **STC 096 TWIN 8PSK/QPSK to QAM Transcoder** is a must have unit for any cable operator in their digital network.

The unique TWIN channel processing technology allows transcoding of two 8PSK/QPSK (DVB & DigiCipher® II) signals into the digital cable standard QAM. It is equipped with a high performance Upconverter offering fully agile RF outputs (45...862 MHz) with state-of-the-art output values.

This innovative and unique solution is one of the most cost- and space efficient digital headend system with excellent performance and a user friendly, remote-controllable management interface.

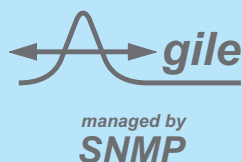
HDTV
HIGH DEFINITION TELEVISION



- **TWIN QAM Transcoder especially for HDTV applications (MPEG-4)**
- **Dual 8PSK/QPSK IN & Dual Agile QAM/RF OUT (45...862 MHz)**
- **Supports ITU J.83 Annex B and DVB-C QAM standards**
- **Modular design allows installation into any 19" cabinet**
- **Various transport stream processing opportunities (NIT, CAT-Filter, Operator-ID, PID-Filter, Network-ID, etc.)**
- **Excellent and high quality values for MER, output level...**
- **Easy and flexible local and remote control & operation**



TWIN 8PSK/QPSK ⇒ QAM



BSR 008 / 19" subrack (max. 8 modules)



- Basic subrack with Control Unit HCB 100 & Bus Extender/Power Supply BEB 100
==> Allows transmission of 12 digital QAM channels
- Extension subrack with Bus Extender/Power Supply BEB 100
==> Allows transmission of 14 digital QAM channels

MSR 016 / 19" subrack (max. 16 modules / front & rear)



- Basic subrack with Control Unit HCB 100
2 Bus-Extender/Power Supply BEB 100
==> Allows transmission of 26 digital QAM channels
- Extension subrack with 2 Bus Extender/Power Supply BEB 100
==> Allows transmission of 28 digital QAM channels

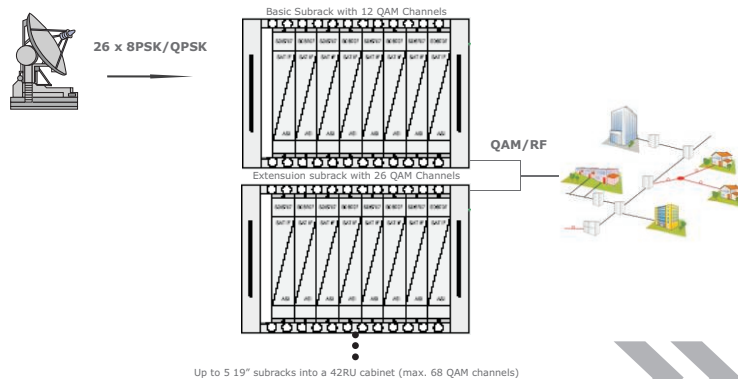
TECHNICAL SPECIFICATIONS

■ STC 096 TWIN 8PSK/QPSK to QAM Transcoder 2 x 8PSK/QPSK ⇒ 2 x QAM/RF

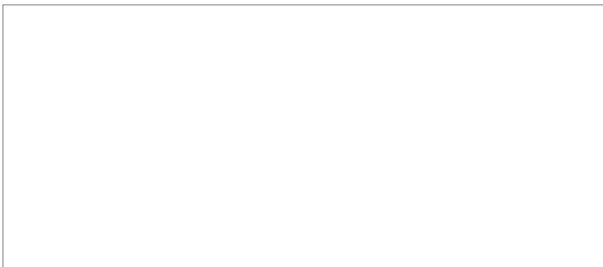
INPUT		950...2150 MHz	Test signals	according QAM-constellation
Frequency range		1 MHz	Measurement signal	unmod. carrier (Signal level)
Frequency step size		± 5 MHz	Max. Output level	30 dBmV
Capture range		04...34 dBmV	Level adjustment range	10 dB
AGC - Level range		75 Ω	Level degree step	0.5 dB
Impedance		F	Channel allocation	adjacent channel capable
Connector		14 dB min.	Output impedance	75 Ω
Return Loss		1.0 dB	Spurious	- 55 dBc
Through loss		VB / DigiCipher® II	Return loss	≥ 14 dB
FEC Decoding		12 V / 400 mA	Interleaving	Conv. I=12
LNB power supply			Error correction / FEC	Reed Solomon (204;188,8)
DVB-S2 Demodulator / Decoder		8PSK/QPSK	Connector	F
Modulation		5...30 MSps	Through loss	1 dB
Symbol rate		3/5, 2/3, 3/4, 5/6, 8/9, 9/10	Output frequency range	45...862 MHz
Code rate (LDPC)	8PSK	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10	Bandwidth	6 MHz
Code rate (QPSK)	QPSK			
DVB-S / DC II / DTV - Demodulator/Decoder		QPSK	Operating parameter	
Modulation		1...45 MSps	Power consumption	12 V (± 0.2 V) / 850 mA
Symbol rate	DVB-S	1...30 MSps	Physical information	
	DC II	5...30 MSps	Operating temperature	- 10...+ 55 °C
	DTV	5...30 MSps	Weight	3.0 lps
Code rate (Viterbi)	DVB-S /DTV	1/2, 2/3, 3/4, 5/6, 6/7, 7/8	Dimensions/Size	2" W x 6" D x 12" H
	DC II	5/11, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 7/8	Management / Current Supply	
QAM - Output		ITU-T J.83 Annex B, DVB-C	Local & Remote Management	Via HCB 100 (Headend Controller)
QAM Modulation		16, 32, 64, 128, 256 QAM	Addressing & Power Supply	Via BEB 100 (Bus Extender)
Symbol rate		1.725 - 6.956 MSps		
Spectral inversion		Auto recognition		
Carrier suppression		> 50 dB		
Roll off		12, 18 %		
Modulation Error Rate (MER)		≥ 40 dB		

ORDERING INFORMATION

TYPE	ORDER #	DESCRIPTION
STC 406	9619.08	TWIN QAM 8PSK/QPSK to QAM Transcoder



Your BLANKOM Partner



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Associated BLANKOM Products

- **AMC 406** Modular Agile TWIN ASI to QAM Modulator
- **TTC 097** Modular Agile TWIN ATSC/8VSB to QAM Transcoder
- **VMC 101** Modular Agile TWIN A/V Modulator
- **AMB 406** Modular ASI to QAM Modulator
- **VMB 195** Modular A/V Modulator
- **EMA 207** 4-way MPEG Encoder/Multiplexer
- **VEA 107** 3-way MPEG Encoder/Multiplexer
- **DRP 3xx** 8PSK/QPSK, COFDM, QAM, ASI - Receivers/Decoders
- **DRD 694** TWIN 8PSK/QPSK Receiver with 2 ASI and GigE OUT
- **DIP 120/121** ASI ⇔ IP Gateways (Bi-directional)
- **ITB 100** Modular ASI ⇔ IP Transcoder (Bi-directional)



TWIN ASI ⇒ QAM

...setting signals