

WISI GT 2300

Software option for IP in 48x QAM



Description

The GT 2300 software option is part of the new GT2000 concept and enables the conversion of IP signals into QAM channels with a very high density. GT2300 supports all common IP protocols such as UDP, RTP, with unicast and multicast as well as SRT to realize secure point-to-point connections. The optional IP input redundancy increases reliability for professional Edge applications. On the output side, 24 QAM channels are initially available, which can be gradually expanded to up to 48 QAM channels using the GTEQAM8 software option. Due to this very high density, one module is sufficient for most applications, which leads to cost savings in operation as well as in acquisition. Typical applications include the conversion of TV signals, which are distributed by cable network operators as IP and should be offered as QAM to the customer. GT2300 is also used in the hospitality sector, where channel processing ensures an independent TV provisioning.

Scope of delivery

- 1x GT2300 software option

At a glance:

- IP to QAM modulation in the highest quality and density
- Up to 48 QAM channels at one RF output
- QAM channel lineup freely adjustable
- DVB transport stream processing with NIT/LCN
- DVB CSA Simulcrypt scrambling
- RTP/UDP input streaming with FEC error correction
- Up to 100 SRT connections (*GTERED)
- IP input redundancy with up to 4 sources (*GTERED)

Technical data

Streaming-Input	
IP-Inputs	256 pcs. (512 pcs. with 2x GTESTRX software option)
IP-Standard	ISO/IEC 13818
IP-Input bitrate	Max. 425 Mbit/s per IPTS, Max. 2500 Mbit/s total
IP-Input protocol	UDP/RTP/RTP+FEC Unicast and Multicast, IGMP v2 and v3, SRT
IP-TS-Input format	SPTS CBR/VBR, MPTS CBR
Number of SRT streams	100 St. (with software option GTESRT / GTESRT25)
Bandwidth SRT input	Max. 500 Mbps
IP-FEC Inputs	Yes, with GTEFEC software option
IP-FEC compliance	SMPT E 2022-1, SMPT E 2022-2
IP-Packet format	MPEG over UDP/IP and RTP/IP
IP-Packet size	188/204 Byte
IP-PCR restamping	Yes
IP-Dejittering	Yes, per default 100ms, individual adjustable
QAM Modulation	
Compliance	DVB-C (EN 300 429), ITU-T J.83 Annex A and B
Modulation type	16-, 32-, 64-, 128-, 256-QAM
Symbol rate	4.45...7.00 MS/s
Roll-Off	12%, 13%, 15%, 18%
MER	> 45 dB (typ. 46 dB)
BER	≤ 1*10 ⁻¹⁰
Spectrum flatness	± 0.3 dB
Shoulder attenuation	≥ 55 dB
RF parameters	
Output ports	1 pcs.
Channels per port	24 pcs. (up to 48 pcs. with 3x GTEQAM8 software option)
Output impedance	75 Ω
Output frequency range	45...1002 MHz
Output frequency window	600 MHz
Output frequency steps	1 kHz
Output frequency stability	± 10 kHz
Channel bandwidth	6/7/8 MHz
Output level (each RF port)	115 dBμV (1 ch.), 101 dBμV (12 ch.), 98 dBμV (24 ch.), 97 dBμV (32 ch.), 96 dBμV (40 ch.), 95 dBμV (48 ch.)
Output level stability	± 1 dB
Output return loss	≥ 14 dB (45 MHz) -1.5 dB/Octave
Output level steps	0...30 dB (0.5 dB steps)
Spurious (Inside TV-Channels)	> 60 dB
Spurious (outside TV-Channels)	45...450 MHz, typ. 66 dB, 450...1002 MHz, typ. 64 dB
Processing	
Service remultiplexing	Yes, with GTESYMUX
PID filtering and remapping	Yes
PCR correction and de-jitter	Yes
Advanced PSI/SI regeneration	Yes

Technical data

NIT generation	Yes, with GTESYMUX
Encryption	Yes, DVB-CSA with GTESCR
Encryption throughput	Max. 2500 Mbps total
Compliance	ETSI EN 300 468
Processing bitrate	Max. 5000 Mbps total
Number of PIDs	Max. 4000 PIDs total
Connectors	
RJ45	0 pcs.
F-socket RF- output	2 pcs. (1x RF output, 1x Test output -20dB ± 1dB)
General data	
Power consumption	Max. 32 W
Operating temperature range	-5°C...+45°C, 23°F...113°F, (ETSI EN 300 019-1-3 Class 3.1)
Max. humidity (non-condensing)	95 %
Electro Magnetic Compatibility (EMC)	EN 50083-2, FCC CFR 47 Part 15 (Class A)
Safety compliance	CE, UL/CSA/CAN 62368-1
Signalling	Multicolor LEDs (Power on - green, Error - red)
Hardware revision	1000
Software version	1.0

Packaging data

Sales unit	1 pcs.
Dimensions (WxHxD) sales unit	0 x 0 x 0 mm
Packaging volume sales unit	0.0 dm ³
Gross weight sales unit	0.0 kg
Shipping unit	1 pcs.
Dimensions (WxHxD) shipping unit	0 x 0 x 0 mm
Packaging volume shipping package	0.0 dm ³
Gross weight shipping unit	0.0 kg
EAN	4010056770686
Article number	77068
Customs tariff number	00000000