

WISI GT 2100

Software option for 10x IP to analogue (PAL, NTSC, SECAM)



Description

The GT 2100 software option is part of the new GT 2000 concept, enabling IP to analogue (PAL, NTSC, SECAM) modulation with HEVC, MPEG-4 or MPEG-2 decoding. The GT 2100 offers a very high density with up to 10 IP to analogue services. Enable new business with the innovative GT 2000 series and be ready for new applications. The Tangram is a sophisticated, modular platform that allows operators to perform multiple functions within one power-efficient chassis. The GT 2000 is based on WISI's brand-new hardware architecture GT 2000 Series. The WISI Tangram chassis uses a fully redundant concept (n+1, 1+1).

Technical data	
Streaming-Input	
IP-Inputs	40 pcs.
IP-Compliance	ISO/IEC 13818
IP-Input bitrate	Max. 425 Mbit/s per IPTS, Max. 850 Mbit/s total
IP-Input protocol	UDP/RTP/RTP+FEC Unicast and Multicast, IGMP v2 and v3
IP-TS-Input format	SPTS CBR/VBR, MPTS CBR
IP-FEC Inputs	Yes, with GTEFEC software option
IP-FEC compliance	SMPTE 2022-1, SMPTE 2022-2
IP-Packet format	MPEG over UDP/IP and RTP/IP
IP-Packet size	188 Byte
IP-PCR restamping	Yes
IP-Dejittering	Yes, per default 100ms, individual adjustable

At a glance:

- High quality IP to analogue PAL/SECAM/NTSC modulation
- Up to 10 analogue channels on 1 RF output
- Outstanding signal parameters by direct digital modulation
- UHD, HD and SD downscaling functionality
- HEVC, MPEG-4, MPEG-2 decoding
- Temperature and output level monitoring
- RTP/ IP input streaming with FEC error correction
- Test port for signal measurement / monitoring

Technical data	
Video processing	
Video decoding	10x MPEG-2 SD (MP@ML) or 10x MPEG-2 HD (MP@HL) or 10x MPEG-4 SD (MP 77 @ Level 3, 3.1) or 10x MPEG-4 HD (HP 100 @ Level 4.1) or 10x HEVC 4:2:0 HD/SD (MP and M10P @ Level 4.1) or 1x HEVC 4:2:0 UHD/4k (MP M10P @ Level 5.2) HEVC decoding with software option GTEHEVCD per video
Video downscaling	10x HEVC/MPEG-4/MPEG-2 HD/ SD or 1x HEVC UHD/4k
Video Standard	PAL/SECAM/NTSC
Aspect Ratio Conversion	Auto, Ignore, Letterbox, Pan and scan, Combined, Forced
Vertical blanking interval	Teletext, Video Programming System, Widescreen Signaling, Line 21 closed captioning

Technical data	
Subtitling/Captioning	DVB teletext, DVB subtitling, SCTE 27, SCTE 20, ATSC A/53
Test lines	17, 18, 330, 331 for PAL/SECAM, NTC-7 Composite, NTC-7 Combination on lines 17 and 280
Test carrier wave	Yes
OSD Video	Yes, text or image PNG
OSD Radio	Yes, text or image PNG
Compliance	ISO 13818-2 (MPEG-2/H.262); ISO 14496-10 (MPEG-4/H.264/AVC); ISO/IEC 23008-2 (MPEG-H/H.265/HEVC)
Video parameters	
Differential gain	<1,5 %
Differential phase	<1,5 %
Group delay time	<50 ns
Luminance non-linearity	<3 %
Video frequency response	±1 dB (0.1...5 MHz)
Video S/N	Typ. 60 dB @10 channels (according to ITU-R Rec. 567)
2T pulse K factor	<1.2 %
Test picture	100% color bars with 1 kHz audio tone
Audio processing	
Audio decoder	ISO 13818-3 MPEG-1 (L1/L2) MPEG-2 (L1/L2), Dolby E-AC3, AC-3 (Dolby and the double-D symbol are trademarks of Dolby Laboratories. Manufactured under license from Dolby Laboratories)
Audi Dolby Decoding	Yes, with GTEDOL
Audio format	Mono/Stereo/Dual, A2, NICAM/ BTSC/SAP
Audio parameters	
S/N mono FM audio PAL/SECAM	Typical 63 dB (BS.468 weighted)
S/N mono FM audio NTSC	Typical 57 dB (BS.468 weighted)
S/N stereo A2	Typical 53 dB (BS.468 weighted)
S/N stereo NICAM	Typical 75 dB (BS.468 weighted)
S/N stereo BTSC MTS	Typical 52 dB (BS.468 weighted)
Frequency response	±1 dB (40 Hz...15 kHz / BTSC SAP 40 Hz...10 kHz)
RF modulation parameters	
TV systems	B/G, D/K, I, M, N
Output level	117 dB μ V (1 ch), 102 dB μ V (10 ch)
Output level stability	±1 dB
Output level setting	30 dB (0,5 dB steps)
Spurious suppression	>60 dB
RF parameters	
Output ports	1 pcs.
Channels per port	up to 10
Output impedance	75 Ω
Output frequency	45...862 MHz
Output return loss	>14 dB (45 MHz) -1,5 dB/Octave
Output frequency window	Channels freely selectable
Output frequency steps	1 kHz

Technical data	
Output frequency stability	±3 kHz
Processing	
PCR correction and de-jitter	Yes
Processing bitrate	Max. 1200 Mbps total
Number of PIDs	Max. 2000 PIDs total
General data	
Power consumption	<33 W
Electro Magnetic Compatibility (EMC)	EN 50083-2, FCC CFR 47 Part 15 (Class A)
Safety compliance	CE, UL/CSA/CAN 62368-1
Operation Mode	PAL-625/SECAM, PAL-M/NTSC, PAL-M/NTSC with BTSC
Hardware revision	1000
Software version	1.0
Possible Software options	GTESUA1, GTESUA3, GTERED, GTEFEC, GTEHEVC, GTEDOL, GTEBTS, GTEMON, GTEASE

Packaging data	
Sales unit	1 pcs.
Shipping unit	1 pcs.
EAN	4010056762261
Article number	76226
Customs tariff number	85176200