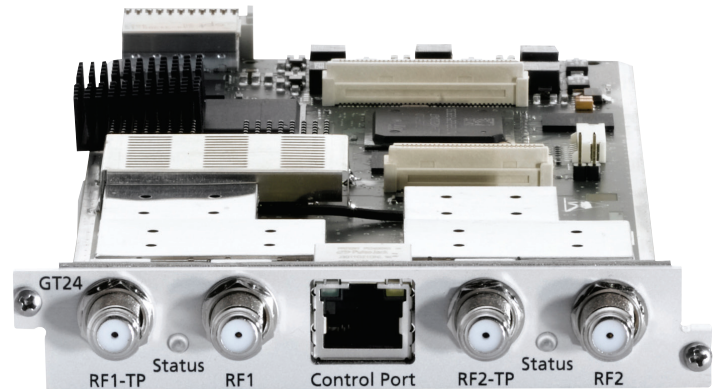


# WISI Tangram IP to 8x DVB-T Card 14MM-GT24W

The GT24W module is part of the Tangram product portfolio. The GT24W module allows you to add up to 8 channels in COFDM (DVB-T) format per module to your network. Tangram is a very high density and highly flexible solution for all kinds of networks. The WISI Tangram chassis uses a fully redundant concept (n+1, 1+1).

## Features and Benefits

- » High-quality IP to COFDM modulation with outstanding signal parameters by direct digital modulation
- » Up to 8 COFDM channels on 2 RF outputs (8 X DVB-T @ 2K FFT or 4 x DVB-T @ 8K FFT)
- » Fully redundant concept (1+1, n+1)
- » High density 48 COFDM channels in 1 RU
- » RTP/ IP input streaming with FEC error correction
- » Easily managed by an intuitive WEB based UI



<b>Interface Gigabit Ethernet</b>	
Data Protocol	MPEG over UDP/IP and RTP/IP
Communication Protocol	Unicast and multicast IGMP V2 (optional V3)
Syntax	SPTS and MPTS (ISO/IEC 13818)
Maximum Data Input Bitrate using Several MPTS Signals	>800 Mbps (using multiple MPTS signals)
Maximum MPTS Input Bitrate	>100 Mbps (per specific MPTS)
Services per MPTS	1024 pcs. (per module)
Number of Filter	up to 32 (multicast/unicast filter)
Jitter Tolerance	±100 ms
<b>TS Processing</b>	
SPTS/MPTS Multiplexing inc	SPTS / MPTS Multiplexing inc. supported
PID-Remapping	PID-Remapping
MPTS Pass-Through	Yes
SI-Table Handling	Yes
Individual Cycle Times for Outgoing PSI-/SI-Tables	Yes
Max. Number of Simultaneous E 16	16 Pcs
<b>COFDM Processing</b>	
MER	>40 dB (typ. 42 dB)
SNR	≥45 dB
Roll-Off	35%
BER	≤1*10 <sup>-10</sup>
I/Q Ampl. Imbalance	≤0,10 %
I/Q Quadratur Error	≤0,10 °
Modulation	QPSK, 16-, 64-QAM
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval	1/4, 1/8, 1/16, 1/32
FFT Mode	2k, 8k switchable
Spectrum Flatness	±0,3 dB
Shoulder Attenuation	≥54 dB
<b>RF parameters</b>	
Output Ports	2 pcs
Channels Per Port	up to 4 (2k-mode) or 2 (2k/8k-mode)
Output Impedance	75 Ω
Output Frequency	45...862 MHz
Output Frequency Window	34.2 MHz (per port)

Output Frequency Steps	1 kHz
<b>Modulation COFDM</b>	
Channel Bandwidth	5 / 6 / 7 / 8 MHz
Output Level (Each RF Port)	115(1 ch), 111(2 ch), 109(3 ch), 107(4 ch) dBμV
Test Port at Each Output	-20 dB (±1 dB)
Output Level Stability	±1 dB
Output Return Loss	≥14 dB (45 MHz -1,5 dB/Okt.)
Output Level Setting	0...30 dB (0,5 dB steps)
Spurious (Inside TV-Channels)	>60 dB
Spurious (Outside TV-Channels)	45...450 MHz, typ. 66 dB, 450...862 MHz, typ. 64 dB, 862...1006 MHz, typ. 64 dB
<b>Connectors</b>	
RJ45	1 pcs
F-socket RF- Output	4 pcs
<b>General Data</b>	
Power Consumption Max	<20,4 W (max)
Dimensions (WxHxD)	34 x 17 x 8 mm
Operating Temperature Range	-5°C...+45 °C (ETSI EN 300 019- 1-3 Class 3.1)
Gross Weight	0.430 kg