

DVB-T 50W & 100W TRANSMITTER

DML-TT110


The TT110 transmitter consists of a 19" 4U rack that contains all the functionalities to connect analog (CVBS) and digital (SDI and ASI) sources and to transmit their signals directly in antenna. Thanks to the power amplifier which is fitted to, together with the robust COFDM modulation, the transmitter is able to cover large distances even in critical scenarios such as high-multipath urban or metropolitan areas. This system can be used both on fixed stations and on mobile vehicles: good results have been obtained for example in the field of avionics, where a transmission distance of about 400 km was reached.

TECHNICAL SPECIFICATIONS*

*specifications may be changed in accordance with the technical department

VIDEO ENCODING

Input video Standard	1 CVBS, 1 SDI, 1 ASI (1 Vpp, BNC, 75 Ω) PAL-BGH, PAL-I, PAL-D, PAL-N, NTSC 4.43, Comb PAL-N, NTSC-N, SECAM-DKL, SECAM-BG, NTSC-M @ 60 Hz, PAL 4.43 @ 60 Hz, NTSC 4.43 @ 60 Hz, PAL-M @ 60 Hz, NTSC-J @ 60 Hz
Encoder	MPEG-2 (ISO/IEC 13818-2) MP@ML
Video processor	9 bit, 4:2:2 Output format, 4:2:0 MPEG
Video bitrate	Up to 15 Mbps
Video resolution	Up to 720 x 576 (SD)

AUDIO ENCODING

Audio input	2 analog (0 dBm, XLR, 600 Ω balanced)
Sampling rate	32 kHz, 44.1 kHz, 48 kHz
Encoding	MPEG-1 (ISO/IEC 11172-3) Layer 1/2
Bitrate	Up to 448 kbps

MODULATOR

MER	typ. 35 dB
Modulation	DVB-T COFDM compliant with ETSI EN 300 744
Constellation	QPSK, 16QAM, 64QAM
Carriers	2048 (2k mode), 8192 (8k mode)
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Guard interval	1/4, 1/8, 1/16, 1/32
Channel bandwidth	7 MHz, 8 MHz

Bitrate	Up to 31.6 Mbps
RF output frequency	2.5 ÷ 2.7 GHz
RF output level	+47 dBm (50 W) CW +43 dBm QPSK / +50 dBm (100W) CW +46 dBm QPSK

GENERAL

Local control	Navigation keys and display
Remote control	RS232, HTTP or SNMP
Power supply	180 ÷ 240 Vac or 13 Vdc
Power consumption	360 W typ.
Operating temperature	-10 ÷ +45 °C
Storage temperature	-20 ÷ +80 °C
Storage relative humidity	10% ÷ 80%
Dimensions	Rack 19" 4U (483 x 178 x 435 mm)
Protection degree	IP50