

## DIGITAL TV COMPACT MODULATOR MOT 300-400 MULTICAST COMPACT

The digital TV compact modulator (300W rms) MOT MULTICAST COMPACT 300-400 can be used as an analog and digital transmitter. This device has an analog output power of 500W ps, and it can be configured with different input interfaces. Furthermore, it is suitable for DVB-T/H, DVB-T2, ISDB-T/TB and ATSC standards, and includes adaptive pre-correction and a high precision GPS receiver for SFN networks.



### MAIN ADVANTAGES

- High efficiency wideband amplifiers technology.
- Embedded Re-Multiplexer/Layer Combiner/TS to BTS (188 to 204 byte) converter for ISDB-TB.
- Adaptive pre-correction.
- On-board high stability GPS receiver with battery.
- Flexible input interfaces.
- SNMP, web interface and touch screen display.

### GENERAL CHARACTERISTICS

DIGITAL OUTPUT POWER DVB-T/T2, ISDBT-TB	300W rms
DIGITAL OUTPUT POWER ATSC	400W rms
ANALOG OUTPUT POWER	500W ps
DIMENSIONS	3 RU
FREQUENCY AGILITY	IV-V
FREQUENCY RESOLUTION	1Hz
PRECORRECTION	Adaptive
RF CONNECTION	7/16, 50 Ohm
AVERAGE CONSUMPTION	1100W
<b>DIMENSIONS</b>	Standard rack unit of 19"

<b>CONTROL</b>	TFT touchscreen, web GUI, SNMP y GPIO
<b>OPERATING TEMPERATURE</b>	-5 to 40°C
<b>MAXIMUM RELATIVE HUMIDITY</b>	90% without condensation

## MODULATOR

### DVB-T/-H/-T2

<b>STANDARD</b>	EN300744, EN302304, EN302755, TS101191, TS102773 (T2-MI), TS102034
<b>INPUTS</b>	4xASI BNC(F), 75 Ohm o 2xASI BNC(F), 75 Ohm & 2xRJ45 TS oIP 10/100/1000 Switch seamless between ASI inputs. Hierarchical and not hierarchical (DVB-T)
<b>FFT</b>	1K (DVB-T2), 2K, 4K, 8K, 8K ext. (DVB-T2), 16K & 16K ext. (DVB-T2), 32K & 32K ext. (DVB-T2)
<b>CODE RATE</b>	All modalities available according to the standard Block Short or Normal (DVB-T2) DVB-T: Reed-Solomon (204, 188) DVB-T2: BCH, LDPC
<b>GUARD INTERVAL</b>	1/32, 1/16, 1/8, 1/4, 19/256 (DVB-T2), 19/128 (DVB-T2), 1/128 (DVB-T2)
<b>CONSTELLATION</b>	QPSK, 16QAM, 64QAM, 256QAM (DVB-T2). Rotated and non rotated (DVB-T2)
<b>MISO PROCESSING</b>	Supported

### ISDB-TB

<b>STANDARD</b>	ABNT NBR 15601, ABNT NBR 15603
<b>INPUTS</b>	4xASI TS/BTS BNC (F), 75 Ohm o 2xASI TS/BTS BNC (F), 75 Ohm & 2xRJ45 TS/BTS oIP 10/100/1000
<b>FFT</b>	Mode 1 (2K), Mode 2 (4K), Mode 3 (8K)
<b>CODE RATE</b>	1/2, 2/3, 3/4, 5/6, 7/8
<b>GUARD INTERVAL</b>	1/4, 1/8, 1/16, 1/32
<b>HIERARCHICAL MODULATION</b>	Up to three layers
<b>CONSTELLATION</b>	QPSK, 16QAM, 64QAM
<b>TIME INTERLEAVER</b>	Fully supported
<b>PARTIAL RECEPTION</b>	Supported

### ATSC

<b>STANDARD</b>	A/53, A/110
<b>INPUTS</b>	4 x ASI / SMPTE-310M BNC (f), 75 Ohm or 2 x ASI / SMPTE-310M, 75 Ohm and 2 x RJ45 oIP 10/100/1000
<b>MODULATION</b>	8-VSB
<b>INPUT BIT RATE</b>	19.39 Mbit/s
<b>BANDWIDTH</b>	6 MHz
<b>MAX PROCESSING DELAY</b>	Up to 1 second (programmable)

<b>ANALOG</b>	
<b>STANDARD</b>	B, G, D, K, M, N, I
<b>INPUTS</b>	Video BNC(F), 75 Ohm, 2*audio Tini-QG "Mini XLR", 6 Pin (M), 600 Ohm
<b>COLOUR SYSTEM</b>	PAL, NTSC

## GPS

<b>INPUT CONNECTOR</b>	N(F), 50 Ohm
<b>INPUT MONITOR/OUTPUT 10MHz</b>	BNC(F), 75 Ohm
<b>INPUT MONITOR/OUTPUT PPS</b>	BNC(F), 75 Ohm
<b>PHASE NOISE</b>	-140dBc/Hz @ 10kHz -150dBc/Hz @ 100kHz
<b>STABILITY</b>	1e-12 / 24 H with disciplined OCXO
<b>HOLD-OVER STABILITY</b>	5µs after 5 hours (optional 1µs after 24 hours)

NOTE: These transmitters have to be operated with suitable filters at the RF output, so as to meet the standards and limits for the suppression of out of band emissions.