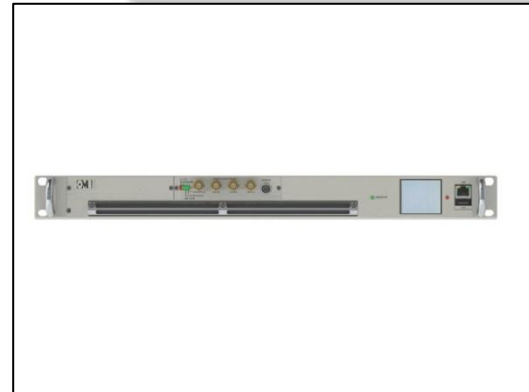


## 50W rms COMPACT DIGITAL TV MODULATOR MOT 50 MULTICAST COMPACT

The 50W rms compact digital TV modulator **MOT 50 MULTICAST COMPACT** can be used as an analog and digital transmitter. This device has an analog output power of 100W ps and 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 (optional).



### 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

|                                  |                                       |
|----------------------------------|---------------------------------------|
| <b>DIGITAL OUTPUT POWER</b>      | 50W rms >36dB                         |
| <b>ANALOG OUTPUT POWER</b>       | 100W ps                               |
| <b>FREQUENCY AGILITY</b>         | Bands I-III-IV-V                      |
| <b>FREQUENCY RESOLUTION</b>      | 1Hz                                   |
| <b>PRECORRECTION</b>             | Adaptive                              |
| <b>RF CONNECTION</b>             | N(F), 50 Ohm                          |
| <b>POWER SUPPLY</b>              | Single phase 100-240V, 50/60Hz        |
| <b>AVERAGE CONSUMPTION</b>       | 215W (for 50W output)                 |
| <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              |

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## MODULATOR

| <b>DVB-T/-H/-T2</b>            |                                                                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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<br>Switch seamless between ASI inputs.<br>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<br>Block Short or Normal (DVB-T2)<br>DVB-T: Reed-Solomon (204, 188)<br>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).<br>Rotated and non rotated (DVB-T2)                                                                                    |
| <b>MISO PROCESSING</b>         | Supported                                                                                                                                                   |
| <b>ISDB-TB</b>                 |                                                                                                                                                             |
| <b>STANDARD</b>                | ABNT NBR 15601, ABNT NBR 15603                                                                                                                              |
| <b>INPUTS</b>                  | 4xASI TS/BTS BNC (F),<br>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                                                                                                                                                   |
| <b>ATSC</b>                    |                                                                                                                                                             |
| <b>STANDARD</b>                | A/53, A/110                                                                                                                                                 |
| <b>INPUTS</b>                  | 4 x ASI / SMPTE-310M BNC (f), 75 Ohm or<br>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 (OPTIONAL)**

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| <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<br>-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.

*\* The images and/or technical specifications are subject to change without previous notice.*

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