

# ATSC DIGITAL TV TRANSMITTERS

## MOT 6000 ATSC

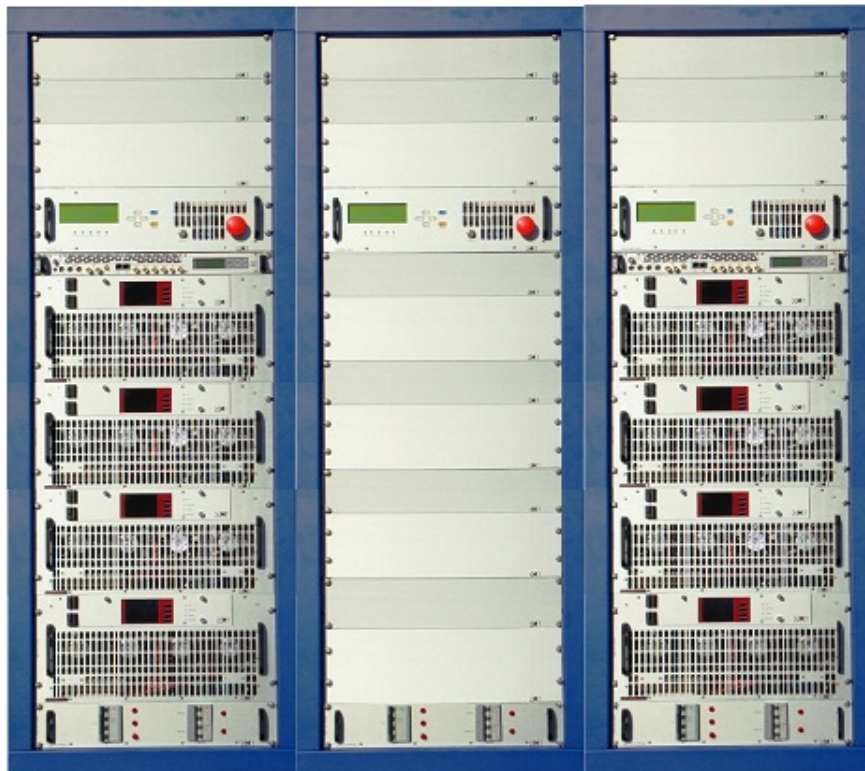
The **MOT 6000 ATSC** transmitter provides a cost-effective solution to meet the most demanding requirements of today's digital Terrestrial Television Broadcasting. It is made up of the **ATSC modulator** and eight **S 900 ATSC** amplifiers. An intermediate external driver is included in order to improve the efficiency of the final amplifying stage. Using the complete alarm and digitalized information systems of this transmitter, the user can control and visualize the most relevant parameters of the transmission: modulation (according to the ATSC standard) and amplification quality. Digital telemetry output is included, and critical or non-critical mask filter can be supplied.



(I+D)

3MOT S1500 YAV 3DIR SGP 2-R COM LIM3 MMS 412 MIX ONE100

DTP3 TX3000



## TECHNICAL SPECIFICATIONS

### ATSC SIGNAL PROCESSING

<b>SUPPORTED MODE</b>	8VSB
<b>BANDWIDTH</b>	6MHz
<b>NETWORK MODE</b>	SFN and MFN
<b>TEST MODE</b>	CW mode, selectable from the control interface

### INPUTS

<b>DVB-ASI: IN A, IN B</b>	MPEG-2 2 ASI inputs Connectors: BNC Female 75Ω
<b>G.703/G.704: IN A, IN B</b>	ETI (NI) 2.048MHz short haul or ETI (NA) 2 G.703/G.704 inputs Connectors: BNC Female 50Ω
<b>GPS CLOCK REFERENCE</b>	Connector: BNC Female Frequency: 10MHz Level: 100mV-3Vpp Impedance: 50Ω
<b>TIME REFERENCE</b>	Connector: BNC Female Frequency: 1PPS Level: TTL Trigger: Positive transition Impedance: 50Ω

### RF OUTPUT PARAMETERS

<b>CONNECTOR</b>	N type Female 50Ω
<b>FREQUENCY</b>	50-1000MHz in 1Hz step
<b>FREQUENCY STABILITY</b>	In accordance with external GPS reference Intern reference 1ppm
<b>LEVEL</b>	-10dBm to 0dBm in 0.1dB step ( optional from 0 to 10dBm)
<b>LEVEL STABILITY</b>	±0.3dB
<b>RETURN LOSS</b>	>20dB
<b>MER</b>	≥43dB
<b>SHOULDER LEVEL</b>	≤-51dBc
<b>SPURIOUS LEVEL OUTSIDE CHANNEL</b>	≤-60dBm at 0dBm output
<b>PHASE NOISE SSB (MEASURED AT 474MHZ)</b>	10Hz: <-56dBc/Hz 100Hz: <-90dBc/Hz 1kHz: <-100dBc/Hz 10kHz: <-110dBc/Hz 100kHz: <-120dBc/Hz 1MHz: <-120dBc/Hz

### PRE-CORRECTOR

<b>NON-LINEAR PRE-CORRECTOR</b>	Gain correction: Max. 12dB Phase correction: -6 a 30°
<b>PRECORRECCIÓN LINEAL</b>	Amplitude correction: ±10dB Amplitude resolution: 0.01dB Group delay correction: ±2000ns Group delay resolution: 1ns

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#### AMPLIFICATION STAGE(S)

FREQUENCY RANGE	IV & V UHF Band: 470 ~ 870MHz
AMPLIFICACIÓN TYPE	Driver: A Class Final Amplifier: AB Class
OUTPUT CONNECTOR	EIA 7/8"
OUTPUT IMPEDANCE	50Ω
MONITOR OUTPUT CONNECTOR	BNC Female
MONITOR OUTPUT IMPEDANCE	50Ω
SPURIOUS (WITH OUTPUT FILTER)	< -60dBc
HARMONICS (WITH OUTPUT FILTER)	< -60dBc
SHOULDER LEVEL	<-36dBc
MER	> 36dB
OUTPUT POWER	6000Wrms

#### CONTROL AND VISUALIZATION INTERFACES

OUTPUT POWER CONTROL	Automatic or Manual (selectable)
PARAMETERS VISUALIZACIÓN	On LCD Display (output power, reflected power, amplifier voltage and current, temperature...)
RS 232 INTERFACE	Connector: 9-pin SUB-D Female
HW INTERFACE	Connector: 9-pin SUB-D Female
ETHERNET	RJ46

#### POWER SUPPLY

VOLTAGE	90 ~ 264V <sub>AC</sub>
FREQUENCY	47 ~ 63Hz
TOTAL CONSUMPTION	20kVA average

#### MECHANICAL SPECIFICATIONS (WITHOUT RACK)

COOLING	Forced Air
DIMENSIONS	1780x1770x900mm
WEIGHT	848Kg

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