



Certif.n° Es01-022



Certif. n° Es01-E021

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## MOT 300 ATSC COMPACT



The **MOT 300 ATSC COMPACT** 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 **MOT 5 ATSC COMPACT** and the **S 300 ATSC** amplifier. 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.

The **MOT 5 ATSC COMPACT** includes a board that with a MPEG-2 encoder. It has analogue (PAL or NTSC) and digital (SDI) video inputs and also analogue (L+R) and digital (SDI signal embedded) audio inputs. Once the audio and video have been coded (MPEG-2) it takes place the 8VSB modulation according to the ATSC A/53, A/54 and A/64 standards. Then, the signal is converted to the desired channel and finally, it is amplified by an A-Class 5Wrms power amplifier.

This equipment is designed to transmit only one TV program in a channel, so it offers the advantage of a simple adaptation from analogue to digital emission. It is only necessary entering the equipment with the signals coming from the analogue microwave link and turn on the equipment to be "*on air*" transmitting in digital. Moreover an ASI Transport Stream input is available to be used.



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## MOT 300 ATSC COMPACT TECHNICAL SPECIFICATIONS

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### POWER SUPPLY

**VOLTAGE** 90 ~ 264VAC  
**FREQUENCY** 47 ~ 63Hz  
**TOTAL CONSUMPTION** 1.9KVA average

### MECHANICAL SPECIFICATIONS (WITHOUT RACK)

**COOLING** Forced air  
**DIMENSIONS** 8UR on 19" standard rack (483 x 44 x 483mm)  
**WEIGHT** 46Kg

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## MOT 5 ATSC COMPACT TECHNICAL SPECIFICATIONS

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### GENERAL PARAMETERS

**FREQUENCY RANGE** 470 ~ 862MHz  
**FINAL STAGE TECHNOLOGY** LDMOS (A Class)  
**CONTROL INTERFACE** Via RS-232 or via Ethernet

### INPUTS

**ANALOG VIDEO** Compound video (optional RGB)  
Connector: BNC Female  
**DIGITAL VIDEO** SDI  
Connector: BNC Female  
**ANALOG AUDIO** Right/Left channel  
Connectors: XLR Female  
**ASI INPUT** Connector: BNC Female

### ATSC MODULATOR

**CHANNEL BANDWIDTH** 6 MHz  
8VSB (A/53, A/54 y A/64 standards)

### RF OUTPUT

**OUTPUT LEVEL** 5W<sub>RMS</sub>  
**CONNECTOR** N Female  
**SHOULDER LEVEL** < -36dBc  
**SPURIOUS AND HARMONICS LEVEL** < -60dB



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## RF MONITOR OUTPUT CONNECTOR BNC Female

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### AMPLIFICATION STAGE TECHNICAL FEATURES

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<b>OUTPUT IMPEDANCE</b>	<b>50Ω</b>
<b>OUTPUT MONITOR CONENCTOR</b>	<b>BNC Female</b>
<b>OUTPUT MONITOR IMPEDANCE</b>	<b>50 Ω</b>
<b>SPURIOUS (WITH OUTPUT FILTER)</b>	<b>&lt;-60dBc</b>
<b>HARMONICS (WITH OUTPUT FILTER)</b>	<b>&lt;-60dBc</b>
<b>SHOULDER LEVEL</b>	<b>&lt;-36dBc</b>
<b>MER</b>	<b>&gt;36dB</b>
<b>OUTPUT POWER</b>	<b>300Wrms</b>
<b>CONTROL AND VISUALIZATION INTERFACES</b>	
<b>OUTPUT POWER CONTROL</b>	<b>Automatic or Manual</b>
<b>PARAMETER VISUALIZATION</b>	<b>On LCD display (output power, reflected power, amplifier voltage and current, temperature...)</b>
<b>RS-232 INTERFACE</b>	<b>Connector: 9-pin SUB-D Female</b>
<b>HW INTERFACE</b>	<b>Connector: 9-pin SUB-D Female</b>
<b>ETHERNET</b>	<b>RJ46</b>