



Certif. n° Es01-022



Certif. n° Es01-E021

OMB EUROPA  
Polígono Industrial Centrovía  
Calle Paraguay, 6  
50196 - La Muela  
Zaragoza, ESPAÑA  
Telf. : +34 976 14 17 17  
Fax: +34 976 14 17 18  
Web: <http://www.omb.com>  
E-mail: [europa@omb.com](mailto:europa@omb.com)

OMB USA  
3100 NW 72nd. Avenue Unit  
112  
MIAMI, Florida 33122 USA  
Telf.: (305) 477 0973  
(305) 477 0974  
Fax: (305) 477 0611  
Web: <http://www.omb.com>  
E-mail: [usa@omb.com](mailto:usa@omb.com)

## MOT 100 ATSC COMPACT



The **MOT 100 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 100 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.



Certif.n° Es01-022



Certif. n° Es01-E021

OMB EUROPA  
Polígono Industrial Centrovía  
Calle Paraguay, 6  
50196 - La Muela  
Zaragoza, ESPAÑA  
Telf. : +34 976 14 17 17  
Fax: +34 976 14 17 18  
Web: <http://www.omb.com>  
E-mail: [europa@omb.com](mailto:europa@omb.com)

OMB USA  
3100 NW 72nd. Avenue Unit  
112  
MIAMI, Florida 33122 USA  
Telf.: (305) 477 0973  
(305) 477 0974  
Fax: (305) 477 0611  
Web: <http://www.omb.com>  
E-mail: [usa@omb.com](mailto:usa@omb.com)

---

## MOT 80 ATSC COMPACT TECHNICAL SPECIFICATIONS

---

### POWER SUPPLY

|   |  |
|---|--|
| <b>VOLTAGE</b>                                  | <b>90 ~ 264VAC</b>                                 |
| <b>FREQUENCY</b>                                | <b>47 ~ 63Hz</b>                                   |
| <b>TOTAL CONSUMPTION</b>                        | <b>0.56KVA average</b>                             |
| <b>MECHANICAL SPECIFICATIONS (WITHOUT RACK)</b> |  |
| <b>COOLING</b>                                  | <b>Forced air</b>                                  |
| <b>DIMENSIONS</b>                               | <b>6UR on 19" standard rack (483 x 44 x 483mm)</b> |
| <b>WEIGHT</b>                                   | <b>33Kg</b>  |

---

## MOT 5 ATSC COMPACT TECHNICAL SPECIFICATIONS

---

### GENERAL PARAMETERS

|                               |                                   |
|-------------------------------|-----------------------------------|
| <b>FREQUENCY RANGE</b>        | <b>470 ~ 862MHz</b>               |
| <b>FINAL STAGE TECHNOLOGY</b> | <b>LDMOS (A Class)</b>            |
| <b>CONTROL INTERFACE</b>      | <b>Via RS-232 or via Ethernet</b> |

### INPUTS

|                      |  |
|----------------------|--|
| <b>ANALOG VIDEO</b>  | <b>Compound video (optional RGB)<br/>Connector: BNC Female</b> |
| <b>DIGITAL VIDEO</b> | <b>SDI<br/>Connector: BNC Female</b>                           |
| <b>ANALOG AUDIO</b>  | <b>Right/Left channel<br/>Connectors: XLR Female</b>           |
| <b>ASI INPUT</b>     | <b>BNC Female</b>  |

### ATSC MODULATOR

|                          |   |
|--------------------------|---|
| <b>CHANNEL BANDWIDTH</b> | <b>6 MHz<br/>8VSB (A/53, A/54 y A/64 standards)</b> |
|--------------------------|---|

### RF OUTPUT

|                                     |                         |
|-------------------------------------|-------------------------|
| <b>OUTPUT LEVEL</b>                 | <b>5W<sub>RMS</sub></b> |
| <b>CONNECTOR</b>                    | <b>N Female</b>         |
| <b>SHOULDER LEVEL</b>               | <b>&lt; -36dBc</b>      |
| <b>SPURIOUS AND HARMONICS LEVEL</b> | <b>&lt; -60dB</b>       |



Certif.n° Es01-022



Certif. n° Es01-E021

OMB EUROPA  
Polígono Industrial Centrovía  
Calle Paraguay, 6  
50196 - La Muela  
Zaragoza, ESPAÑA  
Telf. : +34 976 14 17 17  
Fax: +34 976 14 17 18  
Web: <http://www.omb.com>  
E-mail: [europa@omb.com](mailto:europa@omb.com)

OMB USA  
3100 NW 72nd. Avenue Unit  
112  
MIAMI, Florida 33122 USA  
Telf.: (305) 477 0973  
(305) 477 0974  
Fax: (305) 477 0611  
Web: <http://www.omb.com>  
E-mail: [usa@omb.com](mailto:usa@omb.com)

## RF MONITOR OUTPUT CONNECTOR BNC Female

---

### AMPLIFICATION STAGE TECHNICAL FEATURES

---

|   |  |
|---|--|
| <b>OUTPUT IMPEDANCE</b>                     | <b>50Ω</b>   |
| <b>OUTPUT MONITOR CONECTOR</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>100Wrms</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>  |