

## STUDIO TO TRANSMITTER LINK MT/MR PLATINUM

The OMB radiolink (Studio to Transmitter Link) **MT/MR PLATINUM** is composed by a transmitter and a receiver. The 20W transmitter works within 170-960MHz frequencies in 20MHz sub-bands, it is externally synthesized and it is also controlled by a 25KHz steps microprocessor (10KHz optional).



### MAIN ADVANTAGES

- Balanced mono, stereo (MPX) and 3SCA inputs.
- LCD reading of frequency (6 digits), direct/reflected power, modulation level and component of the pilot signal (19KHz) while transmitting.
- SWR fold-back protection.
- The receiver has double conversion and externally synthesized with the same characteristics as the transmitter.

### GENERAL CHARACTERISTICS

TRANSMITTER MT PLATINUM	
RF OUTPUT POWER	20W
FREQUENCY ERROR	<-2.5ppm
FREQUENCY DRIFT	<1ppm/year
MAX. REFLECTED POWER SUPPORTED	2W
HARMONICS EMISSION	<-60dBc
SPURIOUS EMISSION	<-70dBc, typical -80dBc
RF OUTPUT	Connector N(F), Impedance 50Ω
AUDIO/MPX INPUT LEVEL	-3.5 to 12.5dBm at ±75KHz deviation
AUDIO/MPX INPUT	10kΩ/600Ω, balanced/unbalanced
AUDIO INPUT CONNECTORS	XLR(F)
COMMON MODE REJECTION	>50dB, typical>60dB (20-15000Hz)
AUX. CHANNEL INPUT LEVEL	-12.5 to 3.5dBm at ±7.5KHz deviation -24 to 8dBm at ±2KHz deviation

<b>AUX. CHANNEL INPUT</b>	Connector BNC, Impedance 10K $\Omega$
<b>LF MONITOR OUTPUT</b>	0 to 10dBm at $\pm 7.5$ KHz deviation
<b>PRE-EMPHASIS TIME CONSTANT</b>	0/50/75 $\mu$ s $\pm 2\%$
<b>MODULATION DISTORTION (30-15000Hz)</b>	<0.02% a 75KHz deviation
<b>STEREO CROSS-TALK</b>	>50dB (100-5000Hz) >45dB (50-1500Hz)
<b>AUDIO CHANNELS RESPONSE</b>	30Hz-15KHz $\pm 0.1$ dB
<b>OUT OF BAND AUDIO ATTENUATION (F<math>\geq 19</math>KHz)</b>	>50dB
<b>DEVIATION LIMITER</b>	Adjustable between 0 and -7.1dB
<b>MPX COMPOSITE RESPONSE</b>	10Hz-100KHz $\pm 0.1$ dB
<b>AUX. CHANNEL RESPONSE</b>	10-100KHz $\pm 0.2$ dB
<b>DIMENSIONS</b>	2 standard rack units of 19"

#### RECEIVER MR PLATINUM

<b>NOISE FIGURE</b>	$\leq 10$ dB
<b>IMAGE FREQUENCY REJECTION</b>	$\geq 50$ dB, typical 60dB
<b>DYNAMIC SELECTIVITY</b>	>+10dB @ $\delta f = 300$ kHz >+35dB @ $\delta f = 500$ kHz
<b>AM SUPPRESSION</b>	>45dB
<b>USABLE INPUT LEVEL</b>	-90 to -10dBm (7 $\mu$ V-70mV)
<b>TYPICAL INPUT SENSIBILITY (SIGNAL/NOISE=60dB)</b>	-90dBm (7 $\mu$ V) mono -70dBm (70 $\mu$ mV) stereo
<b>FI MONITOR OUTPUT</b>	10.7MHz/0dBm
<b>WIDE BAND DEMODULATED OUTPUT RESPONSE</b>	15Hz-120kHz +0.1/-3dB
<b>WIDE BAND DEMODULATED OUTPUT LEVEL</b>	+6dBm
<b>MPX OUTPUT LEVEL</b>	-1.5 to +12dBm, 0.5dB/step
<b>MPX OUTPUT RESPONSE</b>	15Hz-67kHz +0.1/-0.5dB
<b>MONO OR STEREO DECODED RESPONSE</b>	30Hz-15kHz $\pm 0.1$ dB
<b>OUT OF BAND MONO OR STEREO AUDIO RESPONSES (F<math>\geq 19</math>KHz)</b>	>50dB
<b>DE-EMPHASIS TIME CONSTANT</b>	0/50/75 $\mu$ s $\pm 2\%$
<b>MODULATION DISTORTION AT 1KHz (100% DEVIATION)</b>	$\leq 0.1\%$ , typical 0.03% (mono) $\leq 0.3\%$ , typical 0.2% (1 stereo channel)
<b>STEREO CROSS-TALK</b>	>50dB (100-5000Hz) >45dB (50-15000Hz)
<b>DIMENSIONS</b>	2 standard rack units of 19"

#### RADIOLINK MT/MR PLATINUM

<b>FREQUENCY RANGE</b>	200-960MHz, in 20MHz sub-bands
<b>MODULATION</b>	FM, 75KHz peak deviation 180K F3E mono 256K F3E stereo
<b>SYNTHESIS STEP</b>	25KHz (10KHz optional)

<b>COMPOSITE MPX OUTPUT RESPONSE</b>	15KHz-67KHz +0.1/-0.5dB <-6dB at 100KHz <-20dB at 125KHz
<b>MONITOR OUTPUT WIDE-BAND RESPONSE</b>	15KHz-100KHz +0.1/-1.5dB -3dB typical at 125KHz -6dB typical at 160KHz
<b>MONO/STEREO DECODED RESPONSE</b>	30Hz-15KHz $\pm$ 0.2dB
<b>SIGNAL/NOISE RATIO (30-20KHz rms)</b>	>70dB, typical 76 (mono) >66dB, typical 72 (stereo)
<b>MODULATION DISTORTION (100% DEVIATION) AT 1KHz</b>	$\leq$ 0.1%, typical 0.03% (mono) $\leq$ 0.3% typical 0.2% (1 stereo channel)
<b>MODULATION DISTORTION (100% DEVIATION) AT 30-7500Hz</b>	$\leq$ 0.25%, typical 0.12% (mono) $\leq$ 0.3% typical 0.2% (1 stereo channel)
<b>STEREO CROSS-TALK (TYPICAL)</b>	>50dB (400-10000Hz) >45dB (100-15000Hz)
<b>INPUT/OUTPUT SIGNALS</b>	Alarm, RF/LF disable, low RF field, on the air, RS232 for monitoring and control
<b>POWER SUPPLY</b>	100-240VAC, 47-63Hz
<b>OPERATING TEMPERATURE RANGE</b>	0 to 35°C recommended -10 to 45°C maximum

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

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