

SERIES MKRT-A



▲ Mother board detail



▲ Rear panel detail



marKoni 'A': when value-for-money is the goal!

The MKRT-A FM Transmitters line has deep roots in its Market of reference, which make it a reference point in its application field.

With a range of 50W to 1500W, this product line is currently used by valuable Worldwide Customers, which represent the best certification for on-field performance over different operating environments.

Through the LED display on the front panel it is possible to check the most important operative parameters such as frequency, output power, reflected power, amplifier temperature, modulation level, alarms, emphasis. It is also possible to set the output frequency and enable/disable controls.

Key Features

- Extremely simple architecture
- Excellent performances on Distortion and S/N ratio
- Analogic telemetry signals available on DB9
- Remote control by RS485 connection
- Functions management through front display
- LDMOS technology

Options

- Stereo Coder (Crosstalk 60dB typ.)
- RDS
- Web Server
- AES/EBU Input

Specifications



▲ Display and control keys

TYPE	POWER	EFFICIENCY
MKRT-A50	50W	38%
MKRT-A100	100W	50%
MKRT-A300	300W	67%
MKRT-A500	500W	71%
MKRT-A1000	1000W	69%
MKRT-A1500	1500W	70%

RF SECTION

Frequency Range	87.5 - 108MHz
Standard Stability	±2.5ppm (0° - 50°C)
High Stability Option	±1.0ppm
Long Term Stability	±0.5ppm (1 year)
Output Power	50W to 1500W CW
Power Level	0 - 100% (from front panel)
RF Output Connector	Nf Type or 7/16" f Type
RF Output Impedance	50 Ohm
Off Lock Attenuation	> 60dB
Asynchronous AM S/N Ratio	> 65dB
Synchronous AM S/N Ratio	> 60dB
Spurious and Harmonics Suppression	Meets or exceeds all FCC and ETSI requir.
Modulation Capability	Meets or exceeds all FCC and ETSI requir.

MPX OPERATION SECTION

Audio Input Connector	BNC Type
Audio Input Impedance	10kOhm unbalanced
Audio Input Level	2.2Vpp nominal -6dB/+12dB adjustable from rear panel
Frequency Amplitude Response	±0.2dB 30Hz - 100kHz
THD (Total Harmonic Distortion)	< 0.1% 30 - 100kHz (< 0.05% 30 - 53kHz)

MONO OPERATION SECTION

Audio Input Connector	XLR Type
Audio Input Impedance	Balanced 600 Ohm / 10kOhm (jumper)
Audio Input Level	2.2Vpp nominal -6dB/+12dB adjustable from rear panel
Frequency Amplitude Response	±0.3dB 30Hz - 15kHz
THD (Total Harmonic Distortion)	< 0.1% 30 - 100kHz (< 0.05% 30 - 53kHz)
Pre-emphasis	Flat, 50µs, 75µs (ON/OFF from display, 50/75 from jumper)
S/N Ratio with CCIR unweighted	> = 75dB
S/N Ratio with CCIR weighted	> = 73dB

INTERNAL CODER OPERATION

Audio Input Connector	XLR Type
Audio Input Impedance	Balanced 600 Ohm / 10kOhm (jumper)
Audio Input Level	2.2Vpp nominal -6dB/+12dB adj. from rear panel
MPX Output Connector	BNC Type
MPX Output Impedance	50 Ohm
MPX Output Level	5.6Vpp
Frequency Amplitude Response	±0.3dB 30Hz - 15kHz
THD (Total Harmonic Distortion)	< 0.1% 30 - 100kHz (< 0.05% 30 - 53kHz)
Pre-emphasis	Flat, 50µs, 75µs (ON/OFF from display, 50/75 from jumper)
Stereo Separation	> 50dB (typ. 60dB) 30Hz - 15kHz
S/N Ratio with CCIR unweighted	> = 73dB
S/N Ratio with CCIR weighted	> = 71dB

SCA OPERATION (2 Inputs)

SCA Input Connector	BNC Type
SCA Input Impedance	10kOhm unbalanced
Audio Input Level	2Vpp nominal for ±7.5kHz deviation
Frequency Amplitude Response	±0.2dB 50k - 100kHz

OUTPUT SIGNAL

RF Monitor Level	-60dBc
RF Monitor Connector	BNC Type 50 Ohm
MPX Analogue Output	0dBu from internal stereo coder
MPX Analogue Connector	BNC Type
MPX Analogue Impedanced	50 Ohm
Pilot Carrier Output	1Vpp digitally synthesized

GENERAL

Power Supply Voltage	90 - 260VAC, 50/60Hz ±4%
Remote Control Port	RS485 / DB9 Connector
USB Port	USB-B Connector
Cabinet	Rack 19"-1U (50W), Rack 19"-2U (100W, 300W, 500W, 1000W, 1500W)
Operating Temperature	-5°C to +45°C

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