



LD-MOS TV TRANSMITTERS MD 05



- ° **New LDMOS technology.** Using the latest LDMOS technology and new PA module design, the RF amplifier is extremely rugged and exhibits excellent thermal characteristics. Linearity and IMD performance are better than older bi-polar technology. This means an excellent transmission quality with analogue or digital operation.
- ° **Digital upgradeable.** The MD 05 transmitter is upgradeable for digital transmission. Optional kits are available for easy field digital upgrading. This reduces the cost of later upgrade to digital while providing the best quality of analogue service currently available.
- ° **Frequency-agile.** Transmitter is fully broadband. The RF stage can operate on any UHF channel, selectable via a digital selector.
- ° **Advanced controller** provides full front panel transmitter control capabilities and extensive metering. Standard or special remote control interface is also available.
- ° **Meets or exceeds** all international standards for safety and electrical requirements.



MD 05 TECHNICAL CHARACTERISTICS

RF Specifications:

Frequency range	470-860 MHz
Bandwidth	Broadband
Output Power:	
MD 05	6 Wps (2 Wrms)
MD 10	10 Wps (3.5 Wrms)
MD 20	20 Wps (6.5 Wrms)
Output impedance	50 Ω
Output connector	N (others on request)
Spurious and harmonic suppression (ref. to carrier)	< - 60 dBc (-62 dBc typ.)
Power stability	< 1%
Intermodulation (IMD-DIN 45004 -8, -16, -10 dB)	< -60 dB (typ. - 62 dBc)

Video characteristics:

Input connector	BNC unbalanced
Input impedance	75 Ω
Input signal level	1 Vp.p.
Input return loss	>30 dB
Differential gain	< \pm 3 %
Differential phase	< \pm 3 °
Amplitude frequency response (in the vision band)	< \pm 0.5 dB
Group delay frequency response (in the vision band)	< \pm 50 nS
S/N ratio	> 64 dB
2T K factor	< 1.8 %
Luminance non linearity	< 2 %

Audio Characteristics:

Input connector	XLR balanced
Input impedance	600 Ω
THD (50 KHz peak deviation at 1 KHz)	< 0.3 %
S/N (50 KHz peak deviation at 1 KHz)	> 65 dB
Deviation from preemphasis curve (20 Hz to 15 KHz)	\pm 0.5 dB

Metering:

Forward and reflected power, DC voltages and currents, inlet and heatsink air temperatures

Alarms:

VSWR, over temperature, vision signal missing, cooling system failure, overdriving



MD 05 TECHNICAL CHARACTERISTICS

Operating conditions:

Operating voltage	110/220/240 Vac \pm 10%, 50/60 Hz	
	single phase or 380/415 Vac \pm 10%,	
	50/60 Hz three phases	
Power Consumption (at maximum power):		
MD 05	44 VA	
MD 10	56 VA	
MD 20	65 VA	
Cooling		forced air with fans
Operating temperature		-5° \div +45° C
Humidity		95% max

Mechanicals (all models):

Dimensions (WxHxD)	540x280x720 mm
Weight	72 kg

Features and specifications subject to change without notice.