

PolyEco 1000

FULL DIGITAL FM TRANSMITTER

TECHNICAL DATA

Frequency range		from 87,5 to 108 MHz (other ranges available on request)
Transmitter tuning steps		1 kHz - fine tuning with 10 Hz steps
Frequency error		Error < 50 Hz not synchronized, <1Hz synchronized
GPS Synchronization	10MHz / 1PPS	Internal/external with digital PLL
Modulation Type	FM	DDS , Direct Digital Synthesis 256kF3E
Audio and Mpx/LR input level		from -6 to +15 dBu @ 75 KHz deviation, 0.1dB steps
Auxiliary input channel level (RDS/SCA)	SCA	from -15 to +6 dBu @ 7,5 KHz deviation
	RDS	from -24 to -3 dBu @ 2 KHz deviation
Digital audio input	AES/EBU	da - 6 a +12 dBfs @ 75 KHz deviation , step of 0.1dB
Modulation distortion	75 KHz dev.	≤0.02%
Audio backup	μSD / USB	MP3 48kHz
S/N ratio, mono	30÷20000Hz	>76 dB, typical 83
	CCIR	>75 dB, typical 79
S/N ratio, stereo	30÷20000Hz	>72 dB, typical 77
	CCIR	>68 dB, typical 72
Audio channels frequency response	30÷15000 Hz	±0.1 dB
MPX input frequency response	30÷75000 Hz	±0.1 dB - (75 ÷ 100 kHz in according to the filter selected)
Pre-emphasis time constant		0μs, 50μs (CCIR), 75μs (FCC)
Detached LF Channel		Mpx, L, R, AES/EBU, Aux, SCA (all main plus reserve)
Modulation Delay		Digitally programmable from 0,1 μs to > 3s
Stereo coding		According to ITU-R BS.450-3, pilot frequency
Stereo separation		>55dB
Pilot frequency		19kHz ±0.1Hz, adjustable level 0 – 12%
RDS generator		According EN62106 PI, PS, ECC, PTY, TP/TA, AF, MS, DI, CT
Rated RF output power		1000W
Output power ALC stability		±3%
Harmonic and spurious emissions		<75dB (harmonic), <80 dBc (spurious)
RF output connector		7/16"
Monitor ports and remote control		Analogic Mpx on BNC, parallel control on SubD9, RS232, RS485, 10/1000T serial ports, GSM, Web server, SNMP
Power supply		100÷250 Vac, 1400W max at nominal power
Operative temperature range	Suggested	da 0 a 35 °C
	Extreme	from -10 to +45 °C (50°C max with derating)
Relative humidity		Up to 95% not condensing
Dimensions (WxHxD) and weight		483x88x455 mm, 10kg max
Reference norms		ETSI EN 302 018 v2.1.1

Note: The data are subject of variations without notice.

