

**PolyEco Series** 

## PolyEco2000

## 2KW FULL DIGITAL FM TRANSMITTER



PolyEco2000 is the latest addition to the popular PolyEco Series family of FM digital transmitters. In addition to the already available power ratings of 50, 100, 300, 500 and 1000W, PolyEco2000 extends the range's flexibility by delivering a generous 2000 Watts, with the option of being powered either single-phase (230V<sub>AC</sub>) or three-phase (400V<sub>AC</sub>).

Fully digital signal processing ensures minimal distortion and a very wide compatibility with analog and digital modulating signals.

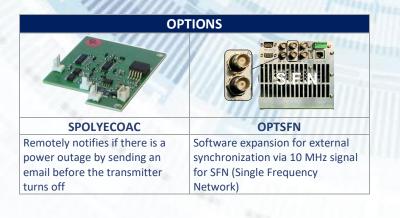
PolyEco2000 is also equipped with a large 4.3" touch-screen display with a "tablet-like" interface that makes the transmitter configuration extremely intuitive and fast, allowing you to bring it on air in just a few minutes.



And, for normal use, no options are needed. It's all standard: stereo encoder, RDS functionality, AES/EBU digital modulation, remote supervision via web server and SNMP protocol. But that's not all: PolyEco2000 even integrates an audio exchanger with a wide choice of backup modulations as standard.

PolyEco2000 repays itself day by day. Like the entire PolyEco Series, it boasts high energy efficiency that minimizes consumption, cutting operating costs, reducing heat emissions and thus increasing reliability.

The small dimensions (483 x 132 x 585 mm) and weight (19 kg) make PolyEco2000 one of the most compact and light in its category.



- Large 4.3" touch-screen display with a "tabletlike" interface
- "Full-Digital" design with a wealth of standard features: stereo, RDS, remote supervision, AES/EBU"
- Integrated audio exchanger with multiple backup sources
- High energy efficiency with low consumption
   and low operating costs
- Power supply either 230V<sub>Ac</sub> or 400V<sub>AC</sub>

## PolyEco20000



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TECHNICAL DATA		
Frequency range		From 87,5 to 108 MHz (other ranges available on request)
Transmitter tuning steps	Willins.	1 kHz - fine tuning with 10 Hz steps
Frequency error	101111 / 1000	Error < 50 Hz not synchronized, <1Hz synchronized
GPS Synchronization	10MHz / 1PPS	Internal/external with digital PLL
Modulation Type Audio and MPX\L\R input level	FM	DDS, Direct Digital Synthesis 256kF3E
		from -6 to +15 dBµ @ 75 kHz deviation, 0.1dB steps
Auxiliary input channel level (RDS/SCA)	SCA	from -15 to +6 dBμ @ 7,5 kHz deviation
	RDS	from -24 to -3 dBμ @ 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	microSD / 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), SD Memory, Audio Streaming
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
Rated RF output power		PI, PS, ECC, PTY, TP/TA, AF, MS, DI, CT 2000W
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	Single phase   Three phase	230V <sub>AC</sub> +10/-15%   400V <sub>AC</sub> 3+N +10/-15% - 2,850W max @nominal power
Operative temperature range	Suggested	da 0 a 35 °C
	Extreme	from -10 to +45 °C (50°C max with derating)
Relative humidity	The a	Up to 95% not condensing
Dimensions (WxHxD) and weight	all the -	483x132x585 mm, 19 kg max
Reference norms	and the former	ETSI EN 302 018 v2.1.1

122

120

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