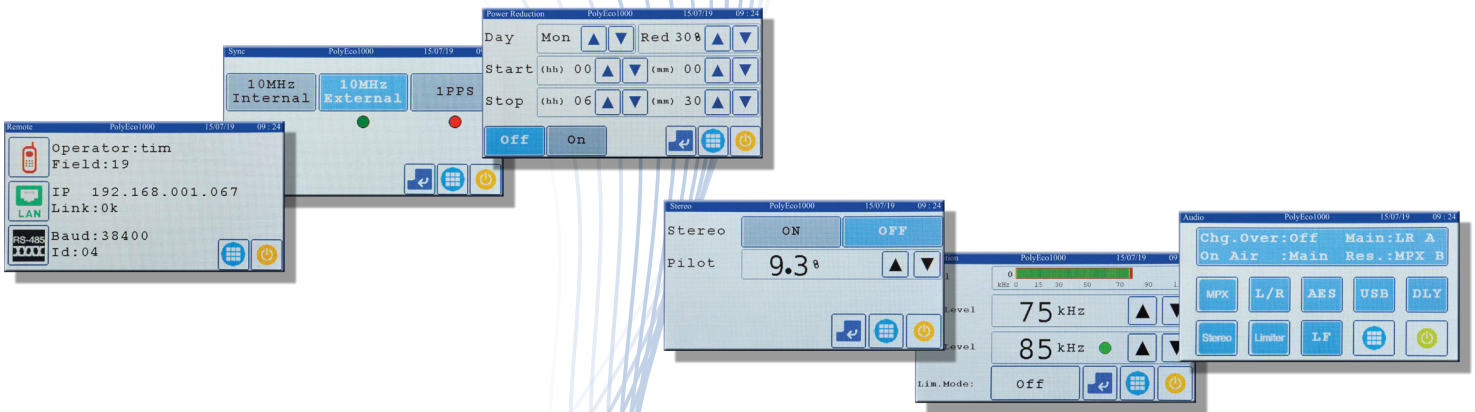
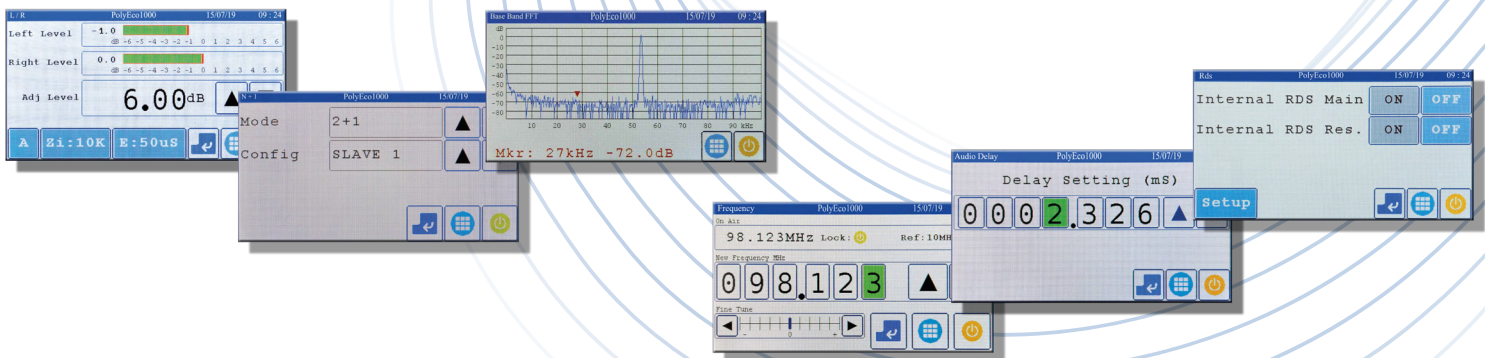


PolyEco

FULL DIGITAL FM TRANSMITTERS



50W • 100W • 300W • 500W • 1000W



PolyEco

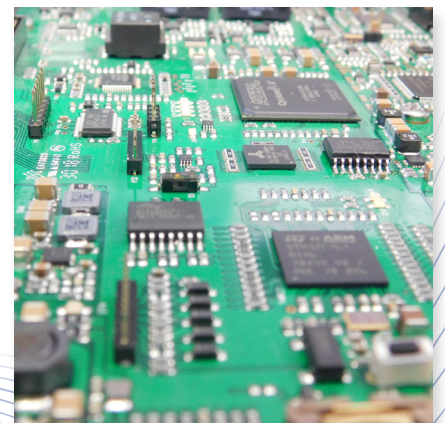
FULL DIGITAL FM TRANSMITTERS

PolyEco is the NEW and innovative family range of Sielco digital FM transmitters. These high performance compact and low-mid power transmitters are actually available in different power versions: 50w (PolyEco50), 100w (PolyEco100), 300w (PolyEco300), 500w (PolyEco500) and 1000w (PolyEco1000).

Lightness, compact and easy-to-use along with "Full-Digital" processing make of PolyEco the most innovative and versatile equipment currently in the Broadcast field and allow high performances and functionalities nowadays at state of the art, assuring the full compatibility with either analog or digital audio sources.

All features can be easily managed by the transmitter directly using the large 4.3" touch-screen display or remotely by the use of internet.

Many advanced features are standard by default such as: stereo coder, RDS encoder, audio change-over system, remote-control via LAN / SNMP, "FFT" spectrum analysis of the audio sources... and much more! Other functionalities are then available to implement your PolyEco. The options include SFN synchronization, audio streaming, MP3 player, N+1, ext... ask more to your Sielco Partner!



50W



TECHNICAL DATA

Frequency range		from 87,5 to 108 MHz (other ranges available on request)
Transmitter tuning steps		10 kHz
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\L\R input level		from -6 to +12 dBu @ 75 KHz deviation, 0.1dB steps
Auxiliary input channel level	SCA	from -12 to +6 dBu @ 7,5 KHz deviation
(RDS/SCA)	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	>80 dB, typical 83
	CCIR	>72 dB, typical 76
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 > 10 ms
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		50W
Output power ALC stability		±3%
Harmonic and spurious emissions		<75dB (harmonic), <80 dBc (spurious)
RF output connector		N
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, 95 W 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, 5.9 kg max
Reference norms		ETSI EN 302 018 v2.1.1

Note: The data are subject of variations without notice.

100W



TECHNICAL DATA

Frequency range		from 87,5 to 108 MHz (other ranges available on request)
Transmitter tuning steps		10 kHz
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\L\R input level		from -6 to +12 dBu @ 75 KHz deviation, 0.1dB steps
Auxiliary input channel level	SCA	from -12 to +6 dBu @ 7,5 KHz deviation
(RDS/SCA)	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	>80 dB, typical 83
	CCIR	>72 dB, typical 76
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 > 10 ms
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		100 W
Output power ALC stability		±3%
Harmonic and spurious emissions		<75dB (harmonic), <80 dBc (spurious)
RF output connector		N
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, 1375 W 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, 8.5 kg max
Reference norms		ETSI EN 302 018 v2.1.1

Note: The data are subject of variations without notice.

300W



TECHNICAL DATA

Frequency range		from 87,5 to 108 MHz (other ranges available on request)
Transmitter tuning steps		10 kHz
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\L\R input level		from -6 to +12 dBu @ 75 KHz deviation, 0.1dB steps
Auxiliary input channel level	SCA	from -12 to +6 dBu @ 7,5 KHz deviation
(RDS/SCA)	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	>80 dB, typical 83
	CCIR	>72 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 > 10 ms
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		300 W
Output power ALC stability		±3%
Harmonic and spurious emissions		<75dB (harmonic), <80 dBc (spurious)
RF output connector		N
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, 490 W 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, 9.5 kg max
Reference norms		ETSI EN 302 018 v2.1.1

Note: The data are subject of variations without notice.

500W



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\L\R input level		from -6 to +12 dBu @ 75 KHz deviation, 0.1dB steps
Auxiliary input channel level	SCA	from -12 to +6 dBu @ 7,5 KHz deviation
(RDS/SCA)	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	>80 dB, typical 83
	CCIR	>72 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 > 10 ms
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		500 W
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, 1375 W 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, 10 kg max
Reference norms		ETSI EN 302 018 v2.1.1

Note: The data are subject of variations without notice.

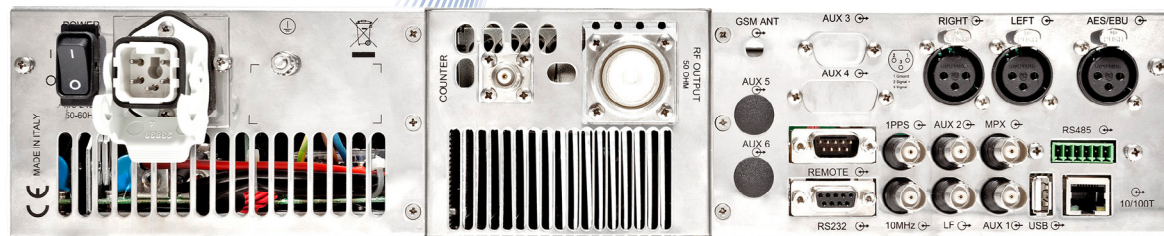
1000W



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\L\R input level		from -6 to +15 dBu @ 75 KHz deviation, 0.1dB steps
Auxiliary input channel level	SCA	from -15 to +6 dBu @ 7,5 KHz deviation
(RDS/SCA)	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), 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 PI, PS, ECC, PTY, TP/TA, AF, MS, DI, CT
Rated RF output power		1000 W
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, 1375 W 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, 10 kg max
Reference norms		ETSI EN 302 018 v2.1.1

Note: The data are subject of variations without notice.



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