

GPS Master Clock

- Accurate to 25ns RMS UTC
- Phase Noise -110dBc/Hz @ 1Hz offset
- Stability @ 1s 8×10^{-13} Typical



The E8000 represents a breakthrough in low noise, traceable, calibration free GPS frequency & time standards. This cost effective frequency reference maintains the high frequency & time accuracy required for the more demanding applications. Low distortion 10MHz Sine & 1PPS outputs.

Considerably enhanced surveillance, wired and wireless communications are possible with the E8000's much lower noise levels

Features

- 1×10^{-12} accuracy
- No Drift
- 50ns 1PPS accuracy to UTC
- RS232 NMEA NTP Time Reference
- Excellent holdover performance

Benefits

- No calibration required
 - GPS receiver provides high accuracy UTC time & frequency reference
 - National & International traceable reference
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Applications

- Frequency Reference for: Satellite Communication ground stations, VHF,UHF, & PMR TX, CDMA, Tetra, DTV & DAB, wired & wireless network sync
 - Network time protocol use in financial services, utilities, security & communications timing
 - Frequency Standard for Calibration / RF Laboratories & Production Test
 - Calibration of: Counters, Frequency Meters, Spectrum & Network/VNA Analysers, Synthesizers & Communication Analysers
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Specification	E8000
Type	OCXO Rack
Output	
Frequency	10MHz
Level	+7dBm ±2dBm 500hms
Number	1 to 10
Connector	BNC
Frequency Accuracy	1.00E-12
Frequency Stability	
1s	2.00E-12
10s	5.00E-12
100s	2.00E-12
1 Hour	6.00E-12
Aging	
1 Day	3.00E-12
1 Month	4.00E-11
1 Year	5.00E-10
Phase Noise dBc/Hz in 1Hz BW	
1Hz	-110dBc/Hz
10Hz	-140dBc/Hz
100Hz	-145dBc/Hz
1kHz	-155dBc/Hz
10KHz	-157dBc/Hz
Harmonics	<-30dBc
Spurious	<-80dBc
Start Up (Warm) Time	<25 Minutes
1PPS	
Accuracy	<±12ns
Holdover	<±50ns
Level	3.3VCMOS
Number	1 to 10
Connector	BNC
Power Supply	
AC	90 - 240Vac
DC	External Input Option
Power Consumption @ 25°C	
Warm Up	11W
Stabilized	5W
Temperature	
Operating	-20°C to +50°C
Storage	-40°C to +70°C
Humidity	90% (Non Condensing)
GPS Antenna	
Gain	28dB @ 3.3V
Noise Figure	0.8dB
Voltage	2.7-5 Vdc
Connector	BNC
Mounting	Magnetic
Cable	5m
Mechanical	
Colour	Aluminium
Dimension	44 x 483 x 240mm
Dimension Packed	100 x 560 x 340mm
Weight	3kg