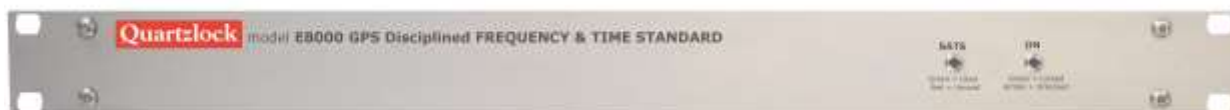


# GPS Master Clock

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

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## Features

- $1 \times 10^{-12}$  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

<b>Specification</b>		<b>E8000</b>
<b>Type</b>		<b>OCXO Rack</b>
<b>Output</b>		
Frequency		10MHz
Level		+7dBm ±2dBm 50Ohms
Number		1 to 10
Connector		BNC
<b>Frequency Accuracy</b>		1.00E-12
<b>Frequency Stability</b>		
1s		2.00E-12
10s		5.00E-12
100s		2.00E-12
1 Hour		6.00E-12
<b>Aging</b>		
1 Day		3.00E-12
1 Month		4.00E-11
1 Year		5.00E-10
<b>Phase Noise</b> dBc/Hz in 1Hz BW		
1Hz		-110dBc/Hz
10Hz		-140dBc/Hz
100Hz		-145dBc/Hz
1kHz		-155dBc/Hz
10KHz		-157dBc/Hz
<b>Harmonics</b>		<-30dBc
<b>Spurious</b>		<-80dBc
<b>Start Up (Warm) Time</b>		<25 Minutes
<b>1PPS</b>		
Accuracy		<±12ns
Holdover		<±50ns
Level		3.3VCMOS
Number		1 to 10
Connector		BNC
<b>Power Supply</b>		
AC		90 - 240Vac
DC		External Input Option
<b>Power Consumption @ 25°C</b>		
Warm Up		11W
Stabilized		5W
<b>Temperature</b>		
Operating		-20°C to +50°C
Storage		-40°C to +70°C
Humidity		90% (Non Condensing)
<b>GPS Antenna</b>		
Gain		28dB @ 3.3V
Noise Figure		0.8dB
Voltage		2.7-5 Vdc
Connector		BNC
Mounting		Magnetic
Cable		5m
<b>Mechanical</b>		
Colour		Aluminium
Dimension		44 x 483 x 240mm
Dimension Packed		100 x 560 x 340mm
Weight		3kg