

GPS Timing & Frequency Reference

- Accurate to 25ns RMS UTC
 - No Drift
 - Internationally Traceable Standard
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The E8-X represents a breakthrough in low cost, traceable, calibration-free ‘‘GPS’’ frequency & time standards. These low cost references maintain the high frequency & time accuracy required for demanding applications. This product is available as a PCB level component.

Features

- 1×10^{-12} accuracy
- 10MHz output
- 1PPS output
- NMEA output

Benefits

- No calibration required
 - GPS receiver provides high accuracy UTC time & frequency reference
 - Compact form factor
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Applications

- Production test frequency reference
- Time and frequency standard for calibration & RF laboratories
- Frequency standard for counters, signal generators, spectrum & network analysers
- Time & frequency reference for satellite communications ground stations CDMA, LTE, DTV & DAB

Specification	E8-X
Type	VTCXO Desktop
Output	
Frequency	10MHz
Level	10dBm ±2dBm 50ohms
Number	1
Connector	BNC
Frequency Accuracy	1.00E-12
Frequency Stability	
1s	2.00E-10
10s	4.00E-10
100s	5.00E-11
1000s	2.00E-11
Phase Noise dBc/Hz in 1Hz BW	
1Hz	-60dBc/Hz
10Hz	-90dBc/Hz
100Hz	-115dBc/Hz
1kHz	-130dBc/Hz
10KHz	-140dBc/Hz
Harmonics	<-30dBc
Spurious	<-75dBc
Start Up (Warm) Time	<15 Minutes
1PPS	
Accuracy	<±75ns
Level	3.3VCMOS
Number	1.00E+00
Connector	BNC
Power Supply	
AC	90 - 240Vac
DC	12 - 18Vdc
Power Consumption @ 25°C	
Warm Up	6W
Stabilized	3.75W
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	Black
Dimension	165 x 105 x 35mm
Dimension Packed	270 x 160 x 85mm
Weight	1kg