

GPS Disciplined OCXO Time & Frequency Reference

- Accurate to 25ns RMS UTC
- -100dBc/Hz @ 1Hz offset phase noise
- No Drift
- Internationally Traceable Standard



- The E8-Y provides low noise, traceable, calibration free time & frequency reference. These time & frequency standards maintain high time & frequency accuracy required for demanding applications. The E8-Y may be considered as a primary reference clock.

Features

- 1×10^{-12} accuracy
- 10MHz output
- 1PPS output
- RS232 NMEA output
- Excellent holdover performance

Benefits

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

Applications

- Wired & wireless network synchronization
- 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-Y			
Type	GPS Disciplined OCXO			
Output				
Frequency	10MHz			
Level	+12dBm ±2dBm into 50 Ohms			
Number	1-8			
Connector	BNC & SMA			
Frequency Accuracy	1.00E-12			
Frequency Stability	A	B		
1s	1.00E-11	2.00E-12		
10s	5.00E-11	5.00E-12		
100s	2.00E-11	2.00E-12		
1 Hour	6.00E-11	6.00E-12		
Phase Noise dBc/Hz in 1Hz BW	A	B	C	D
1Hz	-100	-108	-112	-90
10Hz	-130	-135	-138	-100
100Hz	-145	-145	-152	-154
1kHz	-150	-150	-155	-158
10KHz	-155	-158	-158	-165
Harmonics	<-30dBc			
Spurious	<-80dBc			
Start Up (Warm) Time	<25 Minutes			
1PPS				
Accuracy (GPS locked)	<±12ns			
Holdover (no GPS lock)	<6 µ seconds /24 hrs			
Level	3.3VCMOS			
Number	1			
Connector	BNC			
Power Supply				
AC	90 - 240Vac			
DC	12 - 18Vdc			
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			
Option 47: High gain antenna with up to 70m cable				
Mechanical				
Colour	Black & Silver			
Dimension: Standard size	128 x 110 x 38mm			
Dimension: 4, 6 & 8 outputs	122 x 110 x 60mm			
Weight	0.6kg			