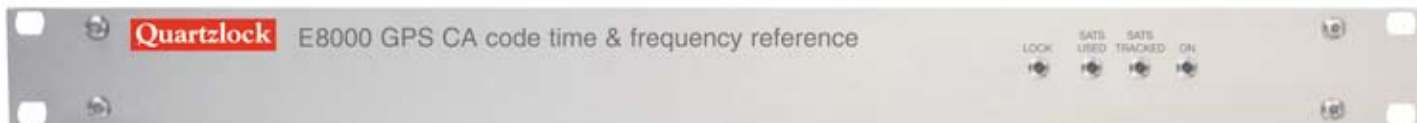


Economy GPS Timing & Frequency Standard



Description

The Quartzlock E8000 represent a breakthrough in exceptionally low cost, 1U rackmount, traceable, **calibration-free “off air” frequency & time standards**. These very low cost references maintain the high frequency & time accuracy required for demanding applications. Low distortion 10MHz Sine & 1PPS outputs. Ultra low noise options are available.

Features

- 1×10^{-12} accuracy
- No Drift
- High Stability
- 1 Year Warranty
- Lowest Cost Available
- Very long production life & support
- Low Noise Options: -115dBc/Hz @ 1Hz offset & -173dBc/Hz noise floor

Benefits

- No Calibration Required
- Traceable Reference, nationally & internationally

Applications:

- **Calibration of:** Counters, Frequency Meters, Spectrum & Network Analysers, Synthesizers, & Communication Analysers
- **Reference for:** VHF, UHF & PMR TX, CDMA, Tetra, DTV & DAB
- Production Test Frequency Standard
- Network Time Protocol use in Financial, Utilities, Security & Communications Timing
- OEM
- **Standard for:** Calibration Labs, Radio Workshops, Labs and Stations

Quality:

- Quartzlock’s Hydrogen Maser based laboratory is used in production test & QA to ensure compliance with offset and stability specifications.

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SPECIFICATION

Outputs

- a) Sinewave, 10MHz, 12dBm +/- 2dBm into 50 Ohms
Harmonics < -50dBc
Spurii <-75dBc
- b) TTL, 3.3VCMOS, 1pulse per second

Frequency Accuracy	1x10 ⁻¹² Long Term		
Hold-over	100us per day		
Short Term Stability	tau	Allan Variance	
	1s	<5x10 ⁻¹²	
	10s	<5x10 ⁻¹¹	
	100s	<5x10 ⁻¹²	
	1000s	<2x10 ⁻¹²	
	10000s	<5x10 ⁻¹²	
Phase Noise (typ)	1Hz	-100 dBc	
	10Hz	-130 dBc	
	100Hz	-145 dBc	
	1kHz	-150 dBc	
	10kHz	-150 dBc	
	Lock Indicator	On - Not Locked	
Off - Locked, Low Phase Error			
Short flash every second - Locked, High Phase Error			
GPS Indicator	Green - Indicates number of satellites used in time solution		
	Amber - Indicates number of satellites tracked but not used in time solution		
Warm Time	<15 minutes to specified accuracy		
Power Supply	85 ... 240V ac		
Current Consumption	250mA typical		
Size			
	a)	19" x 1.75" 1U rack mount	
	b)	105 x 30 x 125mm desktop module	
Antenna	Supplied with cable & connectors		



OPTION 41

Interface	Shared between DPLL and GPS receiver
DPLL	9.6kbaud, RS232, PC compatible (8bits no parity, no handshake)
GPS	9.6kbaud, Motorola binary format (8bits no parity, no handshake)
DPLL Tracking	5mHz to 500mHz typical in 8 binary Bandwidths increments default 20mHz

OPTION 42

Outputs	6 x10MHz low distortion, sinewave, isolated, +13dBm 1V rms 50 Ohms
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OPTION 48

Low Noise Options

Ultra Low Noise Options: -115dBc/Hz @ 1Hz offset & -173dBc/Hz noise floor (contact Quartzlock)

Contact us:

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