

LBE-1420

GPS Locked Clock Source

FEATURES

- Fast Time to Usable Output
- NMEA Data Over Virtual Serial Port
- Supports Multiple GNS systems
- Powered Antenna Port (3.3V up to 50mA)
- USB-C Connectivity
- Low Power 250mA @ 5V
- Output Stability Achieving an Accuracy of 0.000001ppm
- Internal High-Quality TCXO Ensures Clean Clock Signal

 \bullet 3.3V Cmos Square Wave Output With 50 Ω Impedance for Direct Compatibility With RF and Lab Equipment

• Handles Temporary Gps Signal Loss Seamlessly With No Frequency or Phase Jumps

- Low Phase Noise
- Outputs 1Hz to 1.4GHz

APPLICATIONS

• Precision Frequency Reference for Lab Equipment

- RF Transmitter and Receiver Systems (E.g., Ham Radios, VHF/UHF Transconverters)
- Calibration Sources for Radio Receivers and Propagation Beacons
- Master Clocks for Audio/Video Systems, DACs, and Recording Gear
- Referencing Radio Equipment

DESCRIPTION

The LBE-1420 is a high-performance GPSdisciplined oscillator designed for precision frequency calibration and RF reference applications. With GPS-locked output frequencies and exceptional stability, it is ideal for demanding environments requiring both accuracy and reliability.

BLOCK DIAGRAM





SPECIFICATIONS

POWER	
Connector	USB-C (USB 2.0)
Voltage	$5V \pm 10\%$
Current	250mA ±10% @ 5V
OUTPUT	
Connector	SMA Female
Frequency Range	1Hz to 1.4GHz
Frequency Resolution	1µHz
Power	+13dBm @ 10MHz(Normal Mode),
	+1dBm @ 10MHz(Low Power
	Mode)
Amplitude	1.65V into 50 Ω , 3.3V into High
	Impedance
Stability	1x10 ⁻¹² at 1000s
ANTENNA PORT	
Connector	SMA Female
Voltage	3.3V ±5%
Current	Up to a maximum of 30mA
DIMENSIONS	
With Connectors	69x40x12mm
Without Connectors	53x40x12mm

PHASE NOISE CHART

40g

Weight (Main Device)

