DATA SHEET

The Calnex Rb/GPS Reference Source provides a stable 10MHz, 1pps and Time of Day (ToD) reference that can be used with any suitable lab equipment.

Rb/GPS Reference Source

SPECIFICATIONS

Freerun (no GPS)

Output Frequency Accuracy/Stability:
- 12 mins warm-up time @ 25°C: 5E-10 for frequency stability

GPS Locked (needs 24 hrs to be GPS locked)

Output Frequency Accuracy/Stability:
- 12 mins warm-up time @ 25°C: 5E-10 for frequency stability
- 24 hrs warm-up time @ 25°C and GPS locked: 1E-12, typical (requires a stable temperature of ±1°C)

Output time accuracy/stability:
- 24 hrs warm-up time @ 25°C and GPS locked: <50ns (requires a stable temperature of ±1°C)

Holdover (lost GPS)

Output Frequency Accuracy/Stability:
- 12 mins warm-up time @ 25°C: 5E-10 for frequency stability
- 24 hrs warm-up time @ 25°C and Holdover (lost GPS): <3E-11/month (requires a stable temperature of ±2°C)

Output Time Accuracy/Stability:
- 24 hrs warm-up time @ 25°C and Holdover (lost GPS): <2µs/48hr or <1µs/24hr (requires a stable temperature of ±2°C)

ToD Message: NMEA format $GPRMC `$GPRMC,085331.00,A,5558.8958,N,00337.7333,W,,,140312,,,E*43`

Indicators/LEDs: Power On, Rb Locked, Track/Sync

Output Ports: 10MHz Reference Output (BNC), 1pps Reference Output (BNC), ToD/RS-232 (DB9)

Power Supply: 100-240Vac (nominal) at 50/60Hz (via external AC-DC adaptor)

Vibration: Unit must be used in a mechanically stable environment free from shock and vibration

Size: 270 x 60 x 200mm (w x h x d)

Weight: 2kg

Calnex Solutions Ltd
Oracle Campus, Linlithgow
West Lothian EH49 7LR
United Kingdom

t: +44 (0) 1506 671 416
e: info@calnexsol.com

calnexsol.com

CX2007 v2.0