

Low Profile Rubidium Oscillator

- ☐ High Performance Reference
- □ Three year warranty
- 24V dc 13W
- Excellent stability & drift out to 1hr & 1day



The A10-LPRO is a compact cost effective OEM Low Profile Rubidium Oscillator Frequency Standard that maintains the high time & frequency accuracy demanded in applications such as telecoms, aviation, nautical and precision test & measurement. Ideal for mission critical applications. A current production replacement for earlier products. These references maintain high time and frequency accuracy required for demanding applications.

Features

- 10MHz Output
- Stability 3 x 10⁻¹²/100s
- Ageing: 5 x 10⁻¹⁰/year
- 100dBc/Hz @ 10Hz phase noise

Benefits

- Simple integration into systems
- Fits 1U case
- Low Failure risk

Applications

- Telecom Network Synchronisation
- Frequency Calibration
- Broadcast
- Cellular Wireless Base Stations
- Design in frequency reference

Standard Specification

Output	10MHz, +7dBm into 507 OHMS, 5V RMS
Adjustment Mechanical range Electrical range Control range Factory setting	2x10 ⁻⁹ min 2x10 ⁻⁹ min 0–5V ±5x10 ⁻¹¹
Frequency Stability	1s 3x10 ⁻¹¹ 10s 1x10 ⁻¹¹ 100s 3x10 ⁻¹² 1 day 1x10 ⁻¹¹
Aging	1 day 3x10 ⁻¹² 1 month 4x10 ⁻¹¹ 1 year 5x10 ⁻¹⁰
Phase noise	10Hz 100dBc 100Hz 120dBc 1000Hz 140dBc 10000Hz 145dBc
Harmonics	<40dBc
Spurious	<80dBc
Warm time to 1x10 ⁻⁹	5 minutes
Retrace after 24h off and 1h on, same temp	<3x10 ⁻¹¹
Power Supply Power at steady state at 25°C Freq offset over output voltage range	13W @ 24V (22–30Vdc) @ 25°C, Max 2A <2x10 ⁻¹¹
Temperature Operating Storage Freq offset over operating temperature range	-20°C - +50°C -40°C - +70°C <3x10 ⁻¹⁰
Magnetic Field Sensitivity Atmospheric Pressure Approx MTBF, Stationary	<2x10 ⁻¹¹ /Gauss -60m – 4000m <1x10 ⁻¹³ /mbar 100,000Hrs
Mechanical	38 (40 RS232 version) x 94 x 127mm, 650g max 1.5" (1.57" RS232 version) x 3.7 x 5", 23oz max

Pin Connections

C1: 'D' 9 Pin Male

C2: SMA RF Output

- 1. Lock Monitor (BIT)
- 2. DC Return
- 3. Case
- 4. N/C
- 5. Ext 'C' Field Voltage (0-5V)
- 6. N/C
- 7. DC Power (+24V)
- 8. VCXO CV Monitor
- 9. Lamp (Light) Monitor

Dimensions



