

# High Performance Rubidium Oscillator

---

- High Performance Reference
  - Three Year Warranty
  - 24Vdc 13W
  - Excellent Stability & drift
- 



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  $1.5 \times 10^{-12}/100s$
- Ageing  $3 \times 10^{-12}/Day$

## Benefits

- Simple integration into systems
  - Fits 1U case
  - Low failure
- 

## Applications

- Telcom network synchronisation
- Frequency calibration
- Broadcast
- Cellular wireless base stations
- Design in frequency reference

Specification	A10-HPRO
<b>Type</b>	<b>OEM</b>
<b>Output</b>	
Frequency	10MHz
Level	7dBm ±2dBm 500hms
Number	1
Connector	EMI filter pins
<b>Frequency Accuracy</b>	5.00E-11
<b>Adjustment</b>	
Mechanical Range	2.00E-09
Electrical Range	2.00E-09
Control Range	0 - 5Vdc
<b>Frequency Stability</b>	
1s	1.50E-11
10s	5.00E-12
100s	1.50E-12
1000s	2.00E-11
<b>Aging</b>	
1 day	3.00E-12
1 month	4.00E-12
1 year	5.00E-10
<b>Phase Noise</b> dBc/Hz in 1Hz BW	
1Hz	-75dBc/Hz
10Hz	-89dBc/Hz
100Hz	-125dBc/Hz
1kHz	-140dBc/Hz
10KHz	-147dBc/Hz
<b>Harmonics</b>	<-50dBc
<b>Spurious</b>	<-75dBc
<b>Start Up (Warm) Time to lock</b>	<8 Minutes
<b>Retrace</b>	
24h off 1h on same temp	2.00E-11
<b>Power Supply</b>	
DC	24Vdc ±0.5Vdc
<b>Power Consumption @ 25°C</b>	
Warm Up	38W @ 25°C
Stabilized	15W @ 25°C
<b>Temperature</b>	
Operating	-25°C to +50°C
Storage	-55°C to +85°C
Humidity	90% (Non Condensing)
<b>MTBF</b>	100,000 hours
<b>Mechanical</b>	
Connector	EMI filter pins
Colour	Aluminium
Dimension	94 x 127 x 38 mm
Dimension Packed	270 x 160 x 85mm
Weight	0.6kg

Connector: J1: EMI filter Array

Connector Pin Out

1. 10MHz RF Output
2. GND (for RF Output)
3. LAMP status
4. GND (for chassis)
5. RXD (option)
6. Lock
7. VCO
8. Power Return GND
9. TXD (option)
10. +24V dc

