

**Quartzlock** A10-XLB

# Portable 10MHz Rubidium Frequency Reference



## Description

The Quartzlock A10-XLB Rubidium Frequency Reference is a 10 MHz high stability standard with completely portable and multiple power supply options.

## Features

- Low Phase Noise
- Low Drift
- High Stability
- 3 Year Warranty
- Internal Li Ion Rechargeable Battery
- Internal Battery Charger
- External 12Vdc & 24Vdc operation
- External ac operation & charging
- 4 hours battery operation
- Full battery back-up redundant supply operation

## Applications:

- Field Systems & Test Solutions
- Field Frequency Reference
- Portable Frequency Standard
- W-CDMA Wireless Transmitter Ref.
- HDTV Transmitter Reference

## Portable 10MHz Rubidium Frequency Reference

Output Frequency	10MHz sine	
Output Level	+7dBm, 0.7V rms into 50 ohms	
Accuracy	$\pm 5 \times 10^{-11}$ at shipment @25°C	
Phase Noise (SSB)	10Hz	-100dBc
	100Hz	-120dBc
	1KHz	-140dBc
Warm Time	5 minutes to lock @ 25°C	
Retrace	$\pm 3 \times 10^{-11}$	
Frequency Control		
Internal trim range (trimpot)	greater than $2 \times 10^{-9}$	
External trim range	greater than $2 \times 10^{-9}$ (0V~5V)	
Short term stability	1s	$3 \times 10^{-11}$
	10s	$1 \times 10^{-11}$
	100s	$3 \times 10^{-12}$
	hour	$\times 10^{-13}$
	day	$3 \times 10^{-12}$
Aging	month	$4 \times 10^{-11}$
	year	$5 \times 10^{-10}$
	Harmonics	
Second Harmonic	-48 dBc	
Third Harmonic	-45 dBc	
Frequency Drift	$3 \times 10^{-12}$ /day, $3 \times 10^{-11}$ /month	
Status Monitors	Charge, Lock and On LEDs	
Operating Temp. Range	-20°C to +50°C	
Temperature Coefficient (ambient)	$3 \times 10^{-10}$ (-20° to 50°C)	
Storage Temperature	-40° to 70°C	
MTBF	100,000 hours	
RF Connector	BNC	
Power Supply		

Internal Battery is a third generation lithium ion prismatic high capacity 24Vdc supply that will operate the A10-XLB for 4 hours. External charger provided.

External Input Power	13W at 24V@25°C, Max 2A
Input Voltage Range (see options)	22 to 30Vdc
Size	222x215x57mm
Weight	1.75Kg
Warranty (excluding battery)	3 years

### OPTION 01

Multiple Power Supplies  
Ext 12Vdc or 24Vdc supply. 90-240V ac input.  
Redundant battery back-up operation.

### Applications:

- Field Systems & Test Solutions
- Field Frequency Reference
- Portable Frequency Standard
- W-CDMA Wireless Transmitter Ref.
- HDTV Transmitter Reference
- “Supply Noise Immune” Source



- A padded carrying bag is optional  
All inputs and outputs are on the front panel

### Contact us:

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