



## RF Systems & Synthesizers > Airborne > 100 MHz Vibration Isolated Reference Source

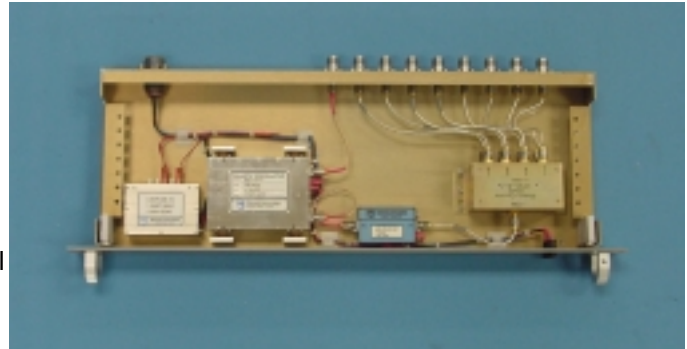
### Features:

- Vibration Isolated
- Voltage Regulated
- Ultra Low Noise
- Phase Lockable

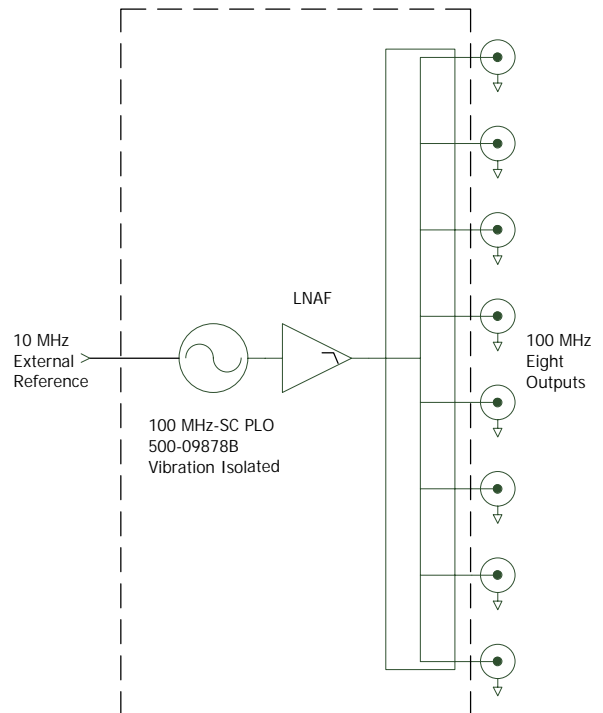
### Applications:

- Airborne Integration
- Frequency Distribution
- System Integration

The 100 MHz Vibration Isolated Reference Source is comprised of one Ultra Low Noise Phase Locked Crystal Oscillator, Low Noise Amplified Filter, and an eight way splitter. The PLO is vibration isolated to help optimize the phase noise performance in a vibration induced environment. The system is setup to accommodate a 10 MHz input frequency for system synchronization and coherency. A Low Noise Voltage Regulator is also incorporated into the design for added filtering of line related noise. This system is ideal for rugged land use as well as airborne applications.



Typical Specifications:	
<b>INPUT</b>	
Frequency	10 MHz
Level	+4 dBm to +15 dBm into 50 ohms
<b>OUTPUT</b>	
Frequency	100 MHz, eight outputs
Level (Specify)	+13 dBm to +17 dBm into 50 ohms
<b>STABILITY</b>	
<b>Output Phase Noise L(f), Static</b>	
100 Hz	-130 dBc/Hz
1 kHz	-155 dBc/Hz
10 kHz	-170 dBc/Hz
Aging (Typical)	± 1 x 10 <sup>-6</sup> per year, after 30 days
Temperature Stability	± 8 x 10 <sup>-7</sup> , 0 to +50°C, (Ref. +25°C)
Harmonics	<-30 dBc
Spurious	<-80 dBc
<b>Phase Lock Alarm (TTL)</b>	
Locked	+3.5 VDC to +5.2 VDC (Hi)
Out-of-Lock	+0.8 VDC max (Low)
LED (Red)	Indicator on the front panel for out-of-lock condition.
<b>MECHANICAL</b>	
Dimensions	19" rack mount, suitable for vibration 16.88 x 8 x 1.75"
Connectors	TNC flange mount (f) for RF signals MS3470W12-10P for primary power
<b>POWER REQUIREMENTS</b>	
Supply Voltage	+28 VDC
Warm-Up Power (+25°C)	<27 Watts at start-up for 5 minutes
Total Power (+25°C)	<18 Watts at steady state



Crystal Oscillators • Blue Tops RF Modules • RF Systems & Synthesizers • Military & Space • Testing Services

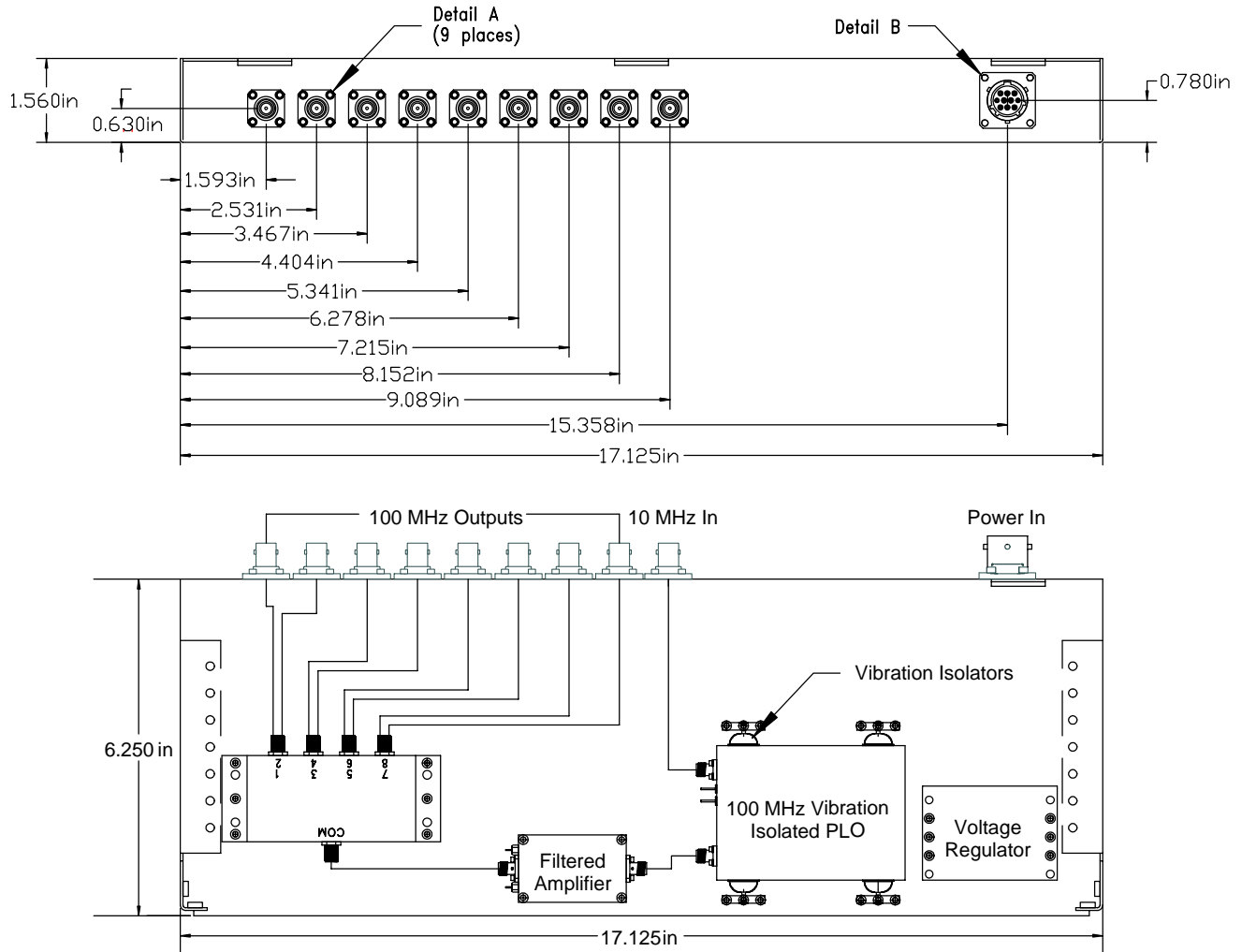
Wenzel Associates, Inc.  
2215 Kramer Lane  
Austin, Texas 78758-4002

www.wenzel.com

sales@wenzel.com  
Phone: 512-835-2038  
Fax 512-719-4086



**RF Systems & Synthesizers > Airborne > 100 MHz Vibration Isolated Reference Source**



Crystal Oscillators • Blue Tops RF Modules • RF Systems & Synthesizers • Military & Space • Testing Services

Wenzel Associates, Inc.  
 2215 Kramer Lane  
 Austin, Texas 78758-4002

www.wenzel.com

sales@wenzel.com  
 Phone: 512-835-2038  
 Fax: 512-719-4086