



ULS700

Features

- PLL LOOP Bandwidth as low as $\leq 10\text{MHz}$
- Better short-term stability, up to $1.0E-13/1s$
- Low Aging Rate $\leq 1.0E-8 / \text{year}$
- Ultra low phase noise $\leq -122\text{dBc}/\text{Hz}@1\text{Hz}$

Applications

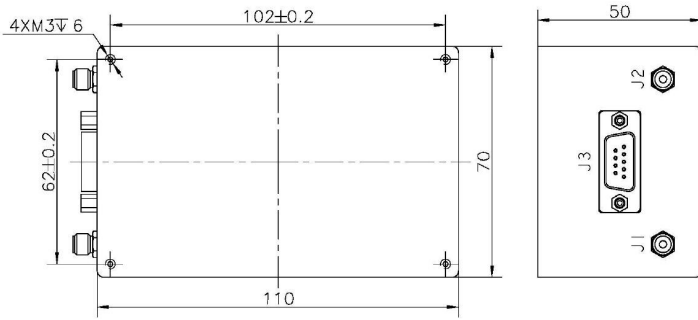
- Frequency standards and sources
- Measuring and calibration equipment
- Navigation

Technical Specifications

Standard Frequency	10 MHz			
Short-term stability (at 10MHz)	$\leq 5 \times 10^{-13}/1s$	$\leq 3 \times 10^{-13}/1s$	$\leq 2 \times 10^{-13}/1s$	$\leq 1 \times 10^{-13}/1s$
Phase Noise (at 10MHz, dBc/Hz, free-running)	Option: S	Option: H	Option: L	Option: U
1 Hz	-110	-115	-118	-122
10 Hz	-130	-135	-138	-142
100 Hz	-150	-150	-153	-155
1 KHz	-155	-155	-158	-158
10 KHz	-158	-158	-160	-160
Aging (after 30 days of continuous operation)	$\leq 1 \times 10^{-8} / \text{year}$			
Input voltage range	12 VDC \pm 5%			
Power consumption (at 25°C)	8W / 4W			
Warm up time (at 25°C to 2×10^{-7})	≤ 5 min			
Input External Reference				
Frequency range	10MHz \pm 0.5Hz (Option: 5 MHz)			
Power	9 \pm 2 dBm			
Output specifications				
Wave form	Sine wave			
Power	10 \pm 3 dBm			
Harmonics	≤ -30 dBc			
Spurious	≤ -80 dBc			
Frequency stability vs Temperature (-40°C to 70°C)	$\leq 2 \times 10^{-9}$			
PLL LOOP Bandwidth	10mHz to 100mHz			
Load	50 Ω \pm 5%			
g sensitivity	$\leq 5 \times 10^{-10} / g$			
Vibration	MIL-STD-202G			
Size (L×W×H)	110×70×50 mm ³			



Outline drawing and Electrical connections (mm)



- J1. 10MHz Output (SMA-F)
- J2. 5MHz/10MHz Input (SMA-F)
- J3/1. LD (TTL Level:L- lock,H-unlock)
- J3/2. Ground
- J3/3. Ground
- J3/4. NC
- J3/5. NC
- J3/6. NC
- J3/7. +12V Power supply
- J3/8. NC
- J3/9. NC

