

High-performance frequency stabilization

Tester

Product profile

FT91 is a high-performance frequency comparator specially designed for high-performance atomic clock testing, which can realize any frequency point measurement of 1-30 MHz, and the additional stability can reach 1.2×10^{-13} at 10MHz, and this module integrates a high-performance special clock internally, which does not affect the performance of the actual measurement in case of any frequency difference between the measured and standard signals.

Application scenarios



Test measuring equipment



Radio navigation system



Radio control system



Research institutes



Measurement Sector

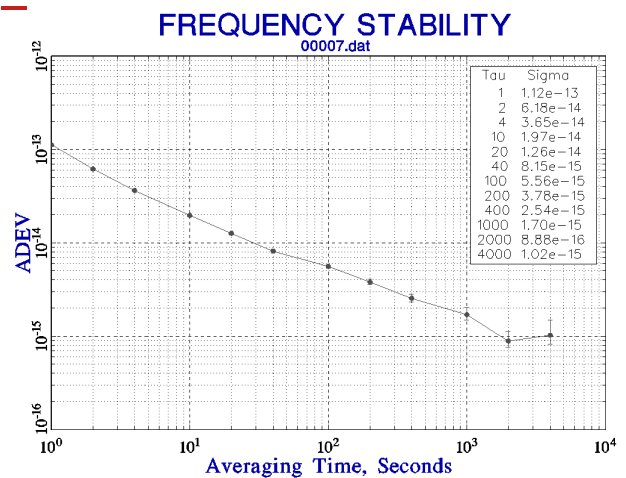


Crystal Oscillator Manufacturing

Product feature

- Background as low as $1.2 \times 10^{-13}/1S$, $2 \times 10^{-15}/1000S$
- Measured Input Frequency 1-30MHz, Standard Input Frequency 10MHz
- Fast determination of the measured frequency, automatic start of the measurement
- Batch test systems can be formed with specific hardware and software.

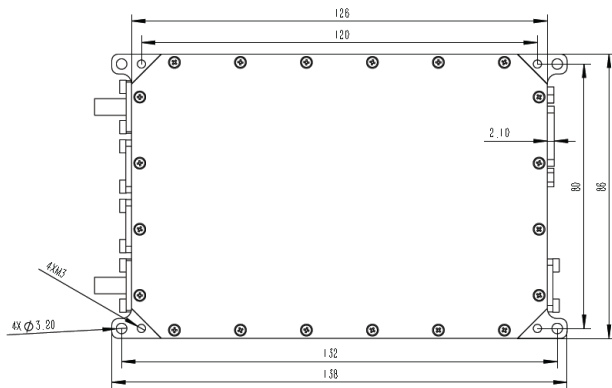
Typical curve



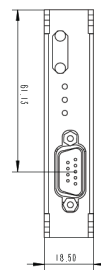
Typical value of the frequency stability: 1s: 1.2×10^{-13} 10s: 2.0×10^{-14} 100s: 5.6×10^{-15}
1000s: 1.7×10^{-15}

Test Item		Technical Indicators
Standard input frequency		1-way, 10 MHz
Standard input power range		5dBm~15dBm
Standard input accuracy		$\pm 5 \times 10^{-7}$
Measured Input Frequency		1-way, 1MHz~30MHz
Measured input power range		5dBm~7dBm
Automatic lock time		< 5s
Storage temperature power supply	1s	$\leq 2 \times 10^{-13}$
	1000s	$\leq 3 \times 10^{-15}$
Working temperature		-20°C ~+70°C
Power supply		+12V~+15V
Current		$\leq 0.5A$
Body size		126mm×86mm×18.5mm

External Dimension



Unit: mm



DSUB9 Pin Definition:

- 1: The Ground
- 2: N/C
- 3: RS232-TX
- 4: RS232-RX
- 5: Locking Indication
- 6: Power supply: +12~+15V
- 7: N/C
- 8: The Ground
- 9: N/C