北斗邦泰
BDSTAR TIME

-T400-LFM

RF isolation
(Radio Frequency isolation)
Amplifier

Product profile

T400-LFM RF isolation amplifier is a low-power and high-performance isolation amplifier with an isolation degree up to 100dB. Additional phase noise and frequency stability are suitable for the performance of hydrogen clock and cesium clock. It has our BDSTAR TIME’s standard packaging and standard interface, and can be installed in various forms, including stacking installation, for easy integration.

Product features

- Low additional phase noise -140dBc@1Hz
- 1-way to 5-way, 100dB isolation
- Design for 10 MHz frequency
- +12~+15VDC power supply

Application area

Radar communication system

Wireless base station

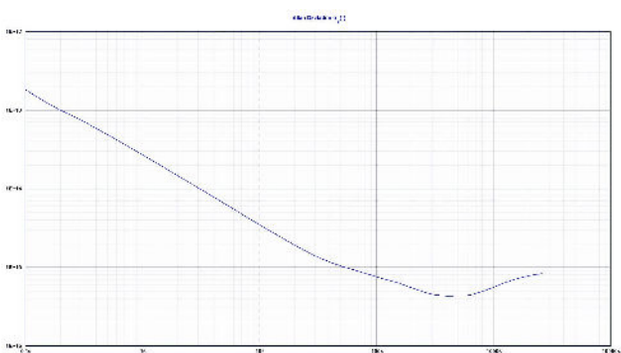
Satellite communication

Frequency standard comparison measurement system

Frequency source

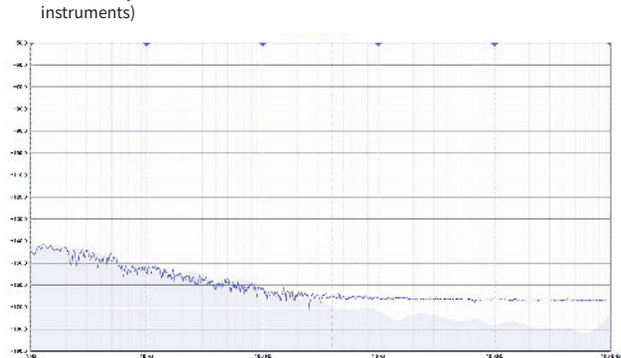
Controlled radar array

Typical curve



Typical value of the frequency stability: (Limited by instruments)

100ms: 1.8×10^{-12}
1s: 2.8×10^{-14}
10s: 3.5×10^{-15}
100s: 7.8×10^{-16}



Typical values of the phase noise: (Limited by instruments)

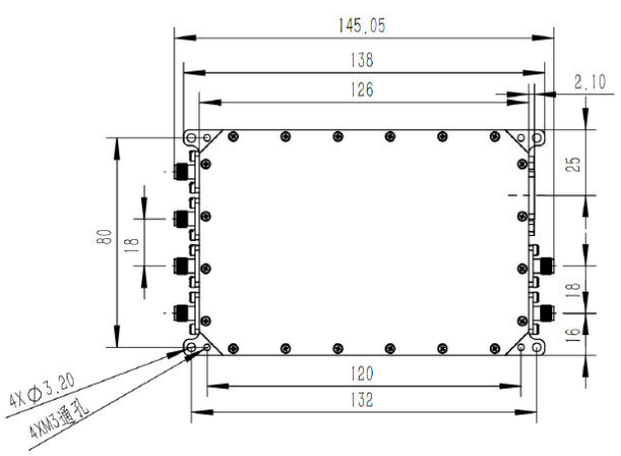
1Hz: -142dBc/Hz
10Hz: -152dBc/Hz
100Hz: -162dBc/Hz
1kHz: -165dBc/Hz
10kHz: -166dBc/Hz
100kHz: -166dBc/Hz

Technical Parameters

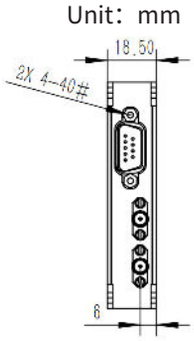
-T400-LFM

Test Item		Technical Indicators
Frequency rate		10MHz
Gain		0±2dB
Input power	1-way	0-15dBm
Degree of isolation		100dB
Additional frequency stability	1s	⩽ 3×10^{-14}
	1000s	⩽ 5×10^{-16}
Additional phase noise	1Hz	⩽ -140dBc/Hz
	10Hz	⩽ -150dBc/Hz
	100Hz	⩽ -155dBc/Hz
	1kHz	⩽ -165dBc/Hz
	10kHz	⩽ -165dBc/Hz
Working temperature		-20°C ~+70°C
Storage temperature		-40°C ~+85°C
Power supply	±4%	+12~+15V
Rate of work		⩽ 3W
External dimension	Body size	126mm×86mm×19mm
Weight		＜ 300g

External Dimension



Unit：mm



Interface Definition（DSUB9, needle）：

PIN 1：The Ground
PIN 6: Power supply +12~+15V
Other：Internal testing. No wiring.