北斗邦泰
BDSTAR TIME

-PLOD260

Digital phase-locked thermostat

Crystal Oscillators

Product profile

PLOD260 is a high-performance phase-locked crystal oscillator with three 10MHz signals and one 5MHz signal output.

BDSTAR TIME’s standard form factor design, internal integration of high-performance constant temperature crystal oscillator and an all-digital phase-locked loop, which accepts 10MHz input signals and can be customized to have one low phase-noise 5MHz crossover output, with bandwidths ranging from 4MHz to 512MHz, and can be set by RS-232 to optimize the phase noise of Rubidium and Cesium clocks.

The bandwidth can be set from 4MHz to 512MHz via RS-232, which can be used to optimize the phase noise and short stability of Rubidium and Cesium clocks.

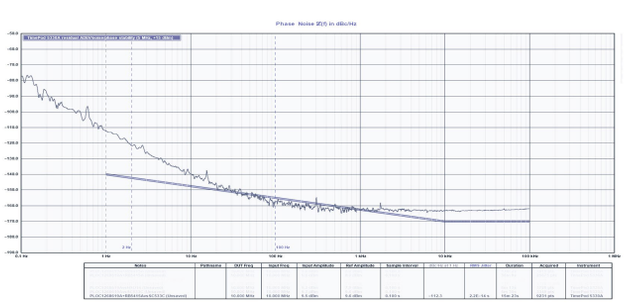
Application area

- Communication navigation
- Sailing
- Sonar
- Radar
- Communication
- Telemetry
- Remote sensing
- Instrumentation

Product features

- Full digital phase-locked loop, built-in high stability and low phase noise constant temperature crystal oscillator
- Standard construction, height 19mm, stackable mounting
- Ultra-low phase-noise output: -140 dBc / Hz@10Hz
- +12~+15VDC power supply
- 3 way 10M output and optional 1 way 5M output

Typical curve

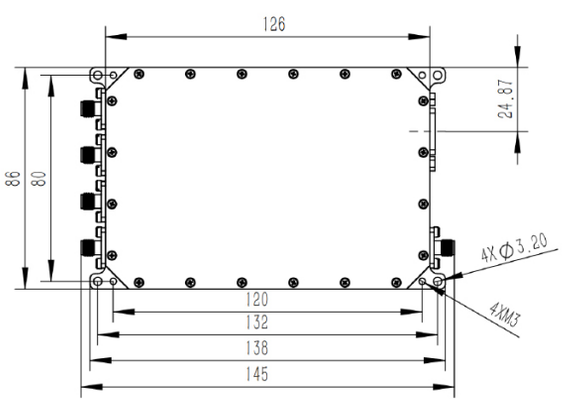


Technical Parameters

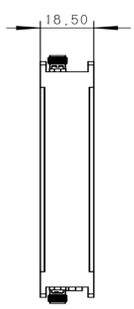
-PLOD260

Test Item		Technical Indicators		
Input frequency		1-way, 10 MHz		
Input power range		5dBm~15dBm		
Input accuracy		$\pm 2\times10^{-7}$		
Output frequency		3-way 10MHz , 1-way 5MHz		
Digital phase-locked bandwidth		4 mHz ~ 512 mHz can be set		
Output frequency stability	1s	$\leqslant 5\times10^{-13}$		
10MHz Phase noise dBc/Hz		Standard	OptionB1	OptionB2
	1Hz	⩽ -105	⩽ -115	⩽ -118
	10Hz	⩽ -135	⩽ -142	⩽ -145
	100Hz	⩽ -155	⩽ -155	⩽ -155
	1kHz	⩽ -160	⩽ -160	⩽ -160
	10kHz	⩽ -160	⩽ -160	⩽ -160
	100kHz	⩽ -160	⩽ -160	⩽ -160
5MHz【optional】 Phase noise dBc/Hz	1Hz	⩽ -111*		
	10Hz	⩽ -141		
	100Hz	⩽ -161		
	1kHz	⩽ -166		
	10kHz	⩽ -166		
	100kHz	⩽ -166		
Working temperature		-20°C ~+70°C		
Storage temperature		-55°C ~+125°C		
Power supply		+12V~+15V		
Power-on current		⩽ 0.8A		
Steady-state current		⩽ 0.5A		
Body size		138mm×86mm×19mm		

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