

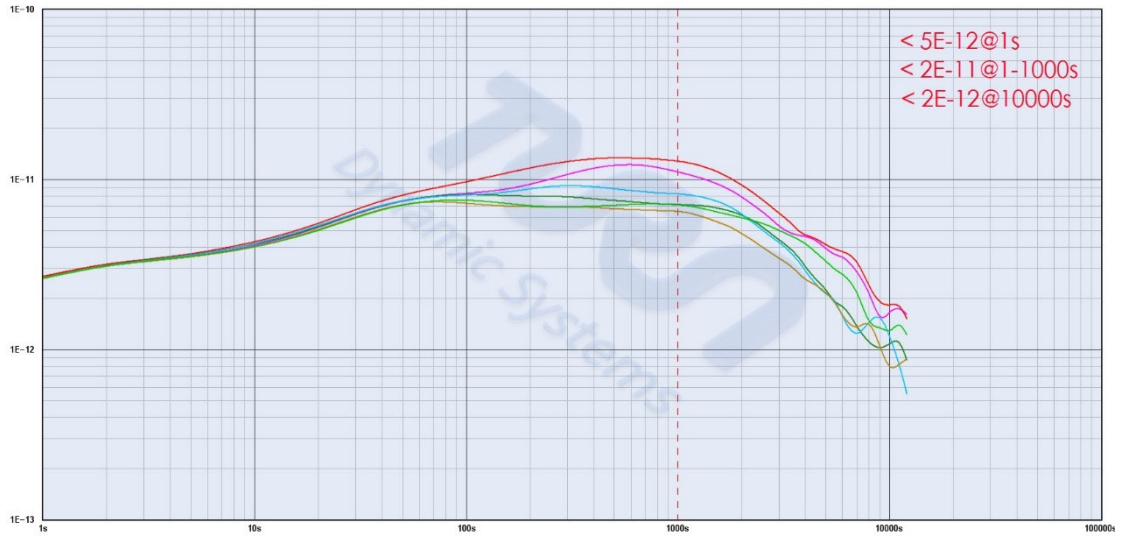
FEATURES

- ◆ 10MHz SC-cut OCXO
- ◆ Output 1-ch 10MHz clock (sine-wave or square)
- ◆ Output 1-ch 1PPS time-pulse(synchronized to GNSS)
- ◆ GPS/BDS dual mode GNSS receiver, max. 32 receiver channels
- ◆ Small size, but still high performance
 $<5E-12@1s$, $<2E-11@1-1000s$, $<2E-12@10000s$
**Note: after 1 day tracking, steady state*
- ◆ Optimized DPLL algorithm and hardware for higher stability
- ◆ 24 hour averaging frequency accuracy $<1E-12$
- ◆ 5V power, $P_d <4W@start-up$, $<2W@steady\ state, 25^{\circ}C$
- ◆ USB port for GNSS receiver data log



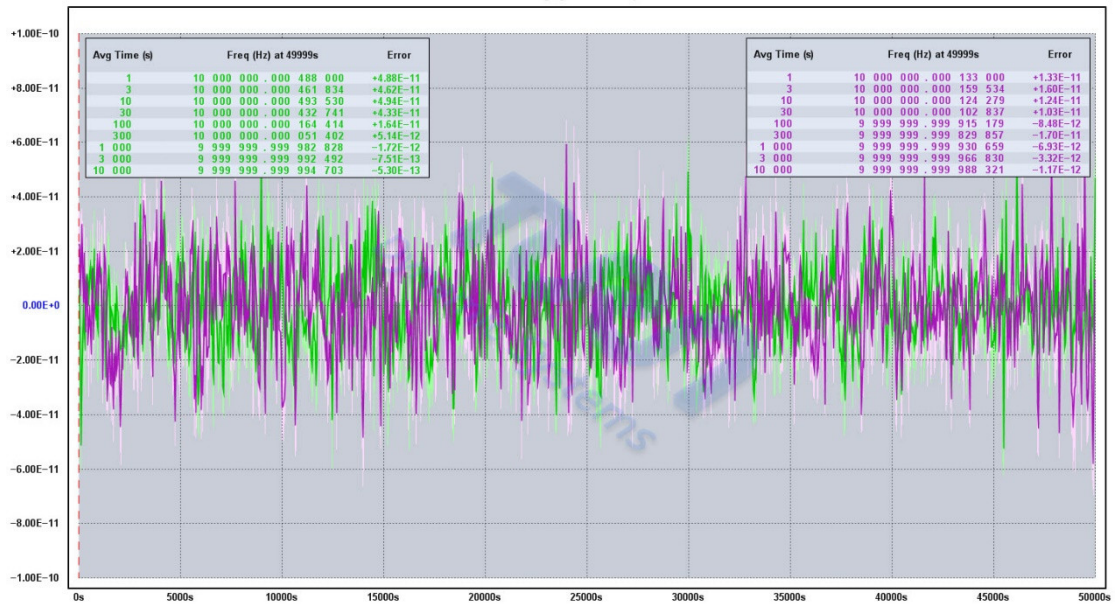
FREQUENCY STABILITY (ADEV, Typical)

TM5101 频率稳定性
Allan Deviation $\sigma_y(\tau)$



FREQUENCY DIFFERENCE vs TIME (Typical)

频率偏差
Frequency Difference
Averaging window: Per pixel



FRONT PANNEL

LED Indicators & Ports



INDICATORS:

- PWR** - Power Up Indicator
- TRACK** - Tracking Indicator, Flicker When DPLL is Tracking GNSS
- GNSS** - GNSS Indicator, Light When GNSS Receiver Worked Good
- COM** - Data Transmit Indicator, Flicker When Data Transmit via USB

PORTS:

- USB** - Micro USB Data Port
As a VCP (Virtual COM Port) when enumerated successfully on PC
The default baud rate is 9600bps, 8 data bit, 1 stop bit, no parity
*The USB interface IC is FT232RL, you can download the driver on FTDI website: <https://www.ftdichip.com/Drivers/VCP.htm>
- POWER** - 5V/1A DC Power Supply Input, 5.0V ~ 5.5V Voltage Range
DC5.5/2.5 socket

REAR PANNEL

GNSS Antenna Input + 10MHz Clock Output + 1PPS Output



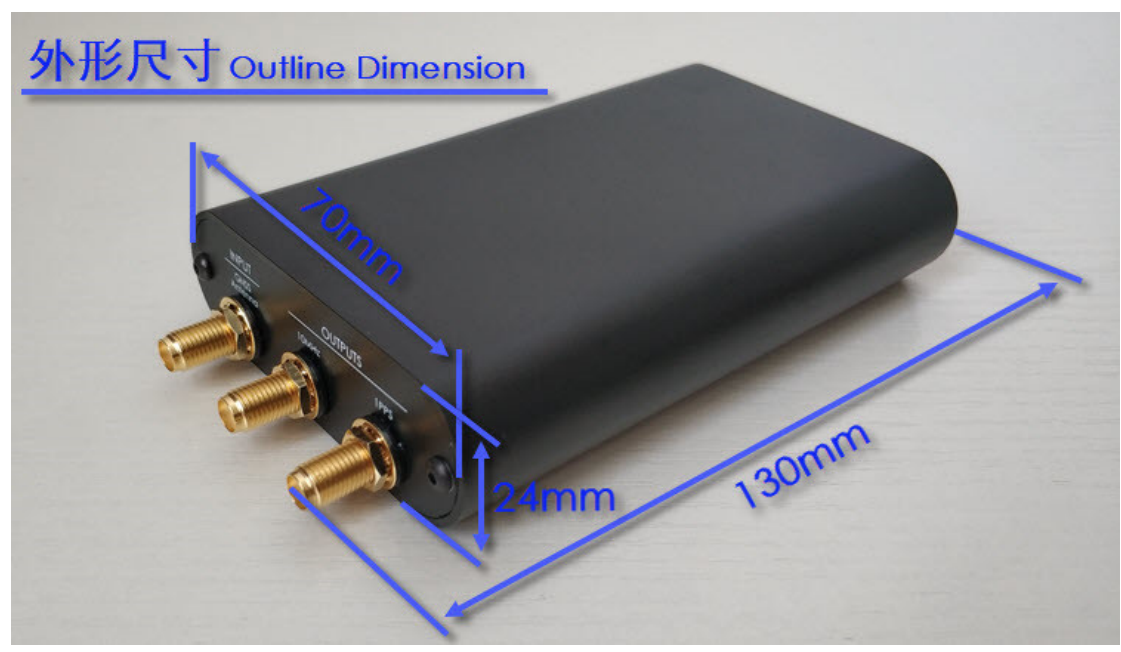
GNSS天线输入 10M时钟输出 1PPS脉冲输出
 GNSS Antenna 10MHz Clock Output 1PPS Output

GNSS Antenna - GNSS Antenna Input, With 3.3V Antenna Feed

10MHz - 10MHz Clock output, 5V HCMOS(**Option:** 2Vpp Sine-Wave)

1PPS - 1PPS Timepulse Output, Rise-Edge Active, Positive-Pulse-Width 100ms, 5V HCMOS

OUTLINE DIMENSIONS



ACCESSORIES

Power Adapter (x1):

Input: 100-240V_{AC}, 50/60Hz, 300mA

Output: 5V_{DC}, 1A

USB Cable (x1):

Connectors: USB 2.0 Type-A to Micro-B

Length: 1m

GNSS Antenna with Cable (x1):

Connector Type: SMA, Female Plug

Mode: GPS/BDS Dual Mode

Feed Voltage: 3V-5V

Cable Length: 5m