

TLP5000

Portable Rubidium Clock

1 PPS output signal

10MHz output signal

6 hours Autonomous mode maintained by internal batteries

6 hours Stability frequency < 5.10-11 and 1PPS shift < 1µs

External PPS synchronized

Battery charger included within the equipment

The TLP5000 is a portable Rubidium clock fitted into a 3U Rack. It includes a **Rubidium oscillator and a battery system** allowing maintaining signals without power supply.

Stability

Once synchronized and with a stabilized Rubidium, the clock achieves a stability < 3.10-11 allowing <1µs PPS shift over 6 hours.

Synchronization

The TLP5000 synchronizes on an external 1PPS.

Control

A display and a set of LEDS allow control and monitoring of the TLP5000.

Battery charge and alarms are displayed on the front panel.

Configuration

No configuration is needed.

Maintenance

The only maintenance is related to the battery which needs to be verified every 3 months and changed every 2 years.



TLP5000 Front Panel

Specifications

Connectors

1 x BNC input for 1PPS synchronization
 1 x BNC output for 1PPS
 1 x BNC output for 10MHz

1PPS Accuracy

±100 ns over input 1PPS when the equipment is synchronized

Internal reference

Rubidium 10MHz

free running mode:

Short term stability:

1s < 1.10⁻¹¹

10s < 3.10⁻¹²

100s < 1.10⁻¹²

Long term stability:

Month < 3.10⁻¹¹

Year < 2x10⁻¹⁰

locked running mode:

Long term stability: < 1.10⁻¹¹

Phase noise

-80 dBc/Hz at 1 Hz

-100 dBc/Hz at 10 Hz

-130 dBc/Hz at 100 Hz

-145 dBc/Hz at 1 kHz

-153 dBc/Hz at 10 kHz

Charging

Power supply range 85 to 260VAC at 47-60 Hz

Power consumption: 50 W

MTBF

>65 000 h (excluding battery)

Temperature

Operating temperature: -0° to 50 ° C

Storage temperature: -20 ° to 70 ° C

Operating relative humidity:
 10% to 90% (non-condensing)

Storage relative humidity:
 5% to 95% (non-condensing)

Dimensions

Rack 3U 19 " Length=245, Depth=300mm

Weight

< 10Kg

Certification

Certified CE, ROHS, REACH and ITAR Free



Command code:

TLP5000

Please contact us for any further options needed