# Pinoten Time Server TS100


The TS100 satellite-synchronous clock module can be used as automatic system, signal system, and communication system. To meet the high-precision requirements of time synchronization and provide a stable and accurate time reference environment, it supports high-precision time reception and fast setup for satellite synchronization. It can receive signals from GPS and BeiDou (BDS) and provide NTP time service.

## Feature

- Uses a multi-constellation GNSS time module to receive satellite signals that respond quickly for satellite acquisition.
- High precision at the millisecond level; the output time error is less than ±0.5 μs compared with international standard time.
- Multiple time output formats, able to meet different design requirements.
- All signal output ports have optical isolation to enhance anti-interference capability.
- Provides 1 channel of NTP network output.

## Specifications

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| Cold-start acquisition time | ≤ 2 s |
| Locked-in acquisition time | ≤ 1 s |
| Auto location time | 1 minute |
| Auto acquisition time | 1 minute |
| Position data update rate (GPS/BeiDou) | 1 Hz / 2 Hz / 4 Hz / 8 Hz / 16 Hz (selectable) |
| Positioning accuracy | 50 m (1σ) |
| Time reception accuracy | ± 1 μs |
| Reception sensitivity | −157.6 dBm |
| Setup / configuration port | Configurable based on actual application |
| Network interface (Wired) | 10Base-T / 100Base-TX auto-negotiation, MDI/MDI-X auto-crossover, IEEE802.3 |
| Protocols | ARP, ICMP, UDP, NTP, SNTP |
| Isolation protection | Electrical isolation voltage: up to 1.5 kV<br>Surge/EMI protection: each output line 600W |
| MTBF | More than 30,000 hours |
| Power | External power DC:5V2A |
| Operating Temperature/Humidity | −10°C to +70°C; 10% to 90% (non-condensing) |
| Storage Temperature/Humidity | −40°C to +85°C; 5% to 95% (non-condensing) |
| Size (L*W*H) | 106mm*80mm*45mm |
| Weight | 0.26kg |