GlobalTime Electronic Co., Ltd

# GTT-400

## NTP - Time Server

GlobalTime offers a wide range of NTP servers and NTP clocks, radio clocks, CDMA clocks. By providing accurate, real-time information, we keep schools, hospitals, airports, train stations, media houses, offices, financial institutes, military bases, public security bureaus and other governmental institutes informed and on the same stage. Our clocks are widely used in more than 60 countries or regions over the world.

Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched, variable-latency data networks. In operation since before 1985, NTP is one of the oldest Internet protocols in current use.

NTP is intended to synchronize all participating computers to within a few milliseconds of Coordinated Universal Time (UTC). It uses the intersection algorithm, a modified version of Marzullo's algorithm, to select accurate time servers and is designed to mitigate the effects of variable network latency.

NTP can usually maintain time to within tens of milliseconds over the public Internet, and can achieve better than one millisecond accuracy in local area networks under ideal conditions. Asymmetric routes and network congestion can cause errors of 100ms or more.


### Key Features:

- RUBIDIUM atomic clock or OCXO oscillator
- Standard GbE ports with patented NTP hardware timestamping
- Security-hardened NTP Reflector™ with firewall protection
- Web-based management with high-security cipher suite
- Exceptional time accuracy to UTC
- Extended environmental specifications
- IPv4 on all ports
- GLONASS / Galileo option
- Four 10M 100M 1000M adaptive network interface
- Supports 60.000 terminals (sync every minute at terminal)
- Support TOD/1PPS/10MHz/PTP/IRIG-B (optional)
- Support PTP (optional)

### Network Protocols:

- RFC 1119 1305 NTP v2/v3/v4
- RFC 1769 2030 SNTP v2/v3/v4
- TIME
- DAYTIME
- SNMP v1/v2/v3
- SSH
- HTTPS
- FTP

### Performance:

- Server Time Level: Stratum 1 via GNSS satellites
- Server time precision: 1μs
- Precision of client time: 15ns
- MTBF:> 90,000 hours

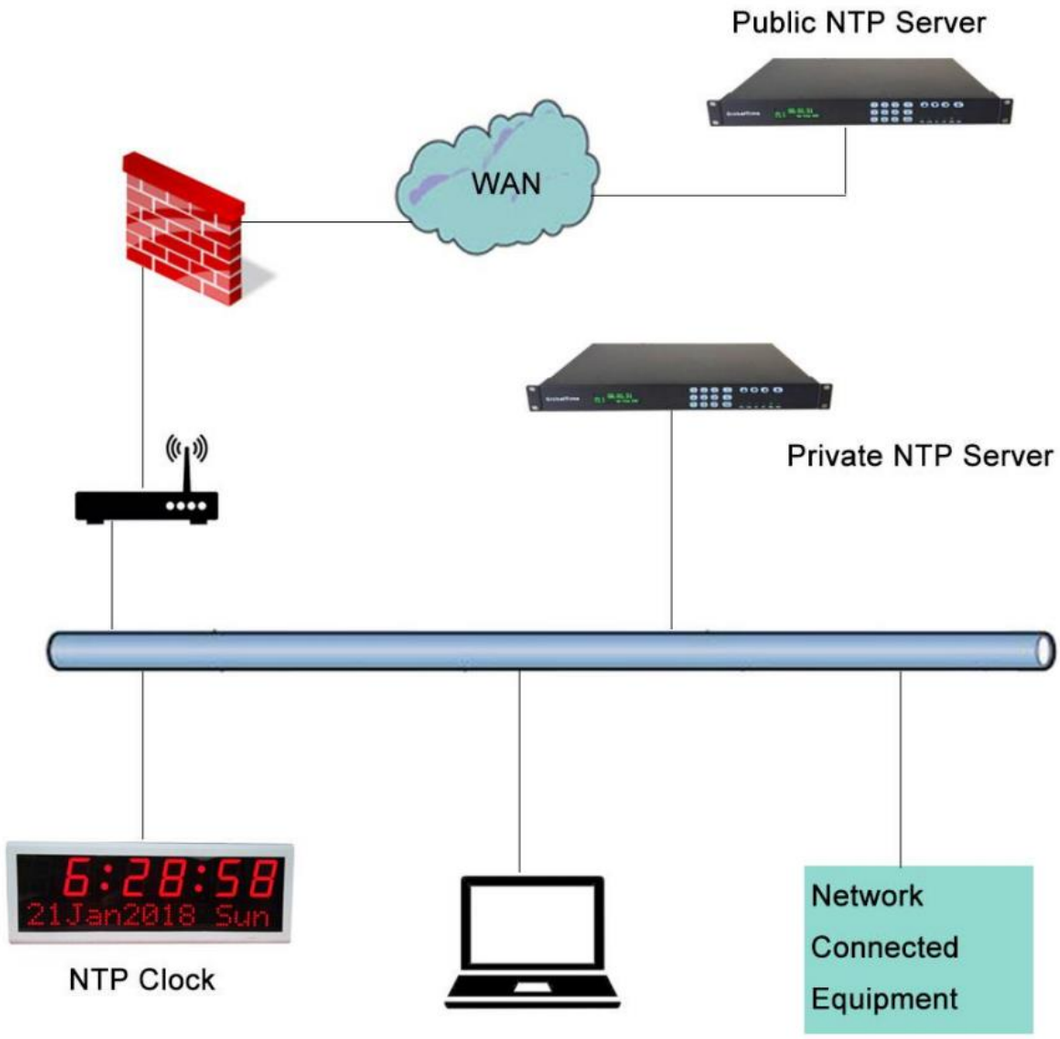
Distributed by.

PT. YASA PERSADA DEWANTARA

Office: Graha Krama Yudha, 4th floor Unit-B Jl. Warung Jati Barat No.43 Jakarta 12760

Direct Calls / WhatsApp: +62 818 8020 45

## Projects & Application




### Applications:

- Synchronizes hundreds of thousands of NTP clients
- Security-hardened for peace-of-mind time service operations
- Multiple GbE NTP ports for easy network configuration and adaptation
- Best-in-class time accuracy for improved log file timestamp precision and usability
- Very reliable and easy-to-use network time appliance for modern networks and business operations

### Mechanical/Environmental:

- Size: 44cm x 28.6cm x 4.4cm,1U rack mount, including BNCs
- Power: 10W, 110-230V AC, 50Hz-60Hz, dual power supplies (with dual-corded connectors and load sharing)
- Operating temperature: -10℃~65℃
- Storage temperature: -40℃~85℃
- Operational humidity: 0~90%, non-condensing, IEC 60068-2-78Cb, IEC 60068-2-30Db

### GPS Antenna:

- Frequency Range: 1575±5MHz
- Voltage: 3~5V
- Antenna Gain.: 3.5dBic
- Expanded Gain.: 37dB
- Noise Figure: 1.5dB typ.
- Interference Suppression: 25 dB typ.
- Operating Temperature(Deg.C): -45~+85
- Storage Temperature(Deg.C): -50~+90
- Humidity: 100%
- Weatherproof: Yes
- Length: 8 m (26 feet)
- Weight (without cable): 200g (7.5oz)
- Color: White
- Connector type: N Type / BNC