



Catalog

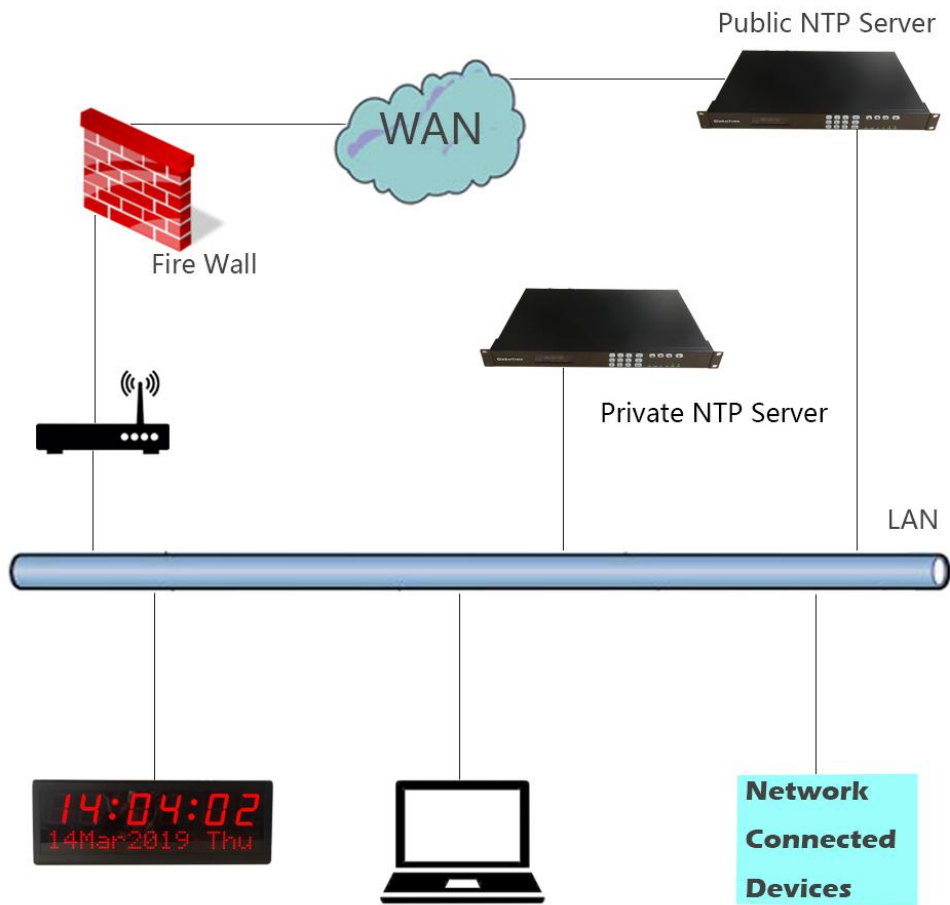


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1. GlobalTime Introduction

GlobalTime is founded in the year 2003 in Shanghai, China. It is a professional manufacturer of synchronized clock systems. We strive towards innovation and reliability. We feature a complete line of NTP servers (GPS servers) and synchronized Clocks. With outstanding R& D team, 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. Please contact us if you have any questions about our NTP products.

2. NTP Introduction

Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched, variable-latency data networks. NTP is the most popular time synchronization protocol in current use.

NTP is intended to synchronize all participating computers to within a few milliseconds of Coordinated Universal Time(UTC).[1]:3 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 100 ms or more.

3. The Power over Ethernet Advantages

PoE is a network standard based on IEEE 802.3af that delivers DC power and data to Ethernet connected devices. PoE is fully compatible with powered and non-powered 10/100BaseT Ethernet devices.

PoE clocks utilize Power over Ethernet (PoE), the same technology that powers IP phones. The PoE clock receives its power and data from a standard CAT5 patch cable via a PoE injector or switch. By simply using a Windows-based application, the user can view and/or change existing configuration of the entire system. The clock will receive its time from a SNTP time server for accurate timekeeping, thus eliminating the need of a master clock.

4. NTP Server



GTT100 (1 LAN Port)



GTT200 (2 LAN Ports)



GTT400 (4 LAN Ports)

4.1. Comparison Chart of Different Models

Model		GTT100	GTT200	GTT400
Time Source		GPS/ GLONASS	GPS/ GLONASS	GPS/ GLONASS
No. of 10M /100M Adaptive Interface		1	2	4
Built- in Clock		Rubidium/ oscillator	Rubidium/ oscillator	Rubidium/ oscillator
Terminal Support		60000	60000	60000
Keyboard		Yes	Yes	Yes
Protocol Support	SNMP	Yes	Yes	Yes
	HTTP	Yes	Yes	Yes
	TIME	Yes	Yes	Yes
	DAYTIME	Yes	Yes	Yes
Options	TOD 1PPS	Yes	Yes	Yes
	IRG-B	Yes	Yes	Yes
Heartbeat Detection		No	Yes	Yes

4.2. Features

- Stratum 1 operation via GPS/ BeiDou/GLONASS satellites
- One two four standard GbE ports, all 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
- Rubidium atomic clock or OCXO oscillator upgrades
- Single power supply or dual power supply option
- Can be set as a slave time server to synchronize with host time server
- One 10M 100M 1000M adaptive network interface
- NTP Reflector option: 20000 NTP client mode three requests per second
- TOD/1PPS/10MHz out
- MTBF: 90000 Hours

5. Digital NTP Clocks

5.1. GTD368 Series Digital IP Clocks for Indoor Use (NTP PoE)

Features

- Available with 4” digits, 4 digit display or 6 digit display
- Red display standard; Optional White, Blue, Green, Amber, Yellow displays
- Time is automatically set by Simple Network Time Protocol(SNTP)- no master clock or serial connection required
- Uses PoE (Power over Ethernet) for easy installation and operation
- Static IP or DHCP addressing

Synchronized Time Systems

- 12 or 24 hour display
- Automatic Daylight Saving Time change (if applicable)
- Adjustable brightness (brilliant, bright, normal, dim, off)
- Capability to receive realtime countdown command
- If connection to NTP server is lost the clocks will continue to run on the built-in time base. When the connection is restored it will synchronize automatically.
- The clock features time loss notification by having a light on on the right lower corner
- Can be single sided (has one display) or double sided (has two displays)



Single-sided



Double-sided



Double-sided



Ceiling Mounting



Wall Mounting

Additional Highlights

Capable of interface with:

- Temperature and/ or humidity sensor
- Bell relay

5.2. Digital IP Clock with Calendar/ Text Display- GTD366 (NTP PoE)



Black Metal Case



Back Side



White Metal Case



Grey Stainless Steel Case (SS304 Material)

Features

- Available with 2.3" digits, can display calendar or English text (less then 32 bytes)
- Red display standard
- Time is automatically set by Simple Network Time Protocol(SNTP)- no master clock or serial connection required
- Uses PoE (Power over Ethernet) for easy installation and operation
- Static IP or DHCP addressing
- 12 or 24 hour display
- Automatic Daylight Saving Time change (if applicable)
- Adjustable brightness (brilliant, bright, normal, dim, off)
- Capability to receive realtime countdown command

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Synchronized Time Systems

- If connection to NTP server is lost the clocks will continue to run on the built-in time base. When the connection is restored it will synchronize automatically.
- The clock features time loss notification by having a light on on the right lower corner
- Can be single sided (has one display) or double sided (has two displays)

Additional Highlights

Capable of interface with:

- Temperature and/ or humidity sensor
- Bell Relay

5.3. 2.3” Rack-mounted NTP Clock- GTD362



Specifications

- Case: Metal in Black
- Size: 44cm*18cm*8.8cm
- Weight: 2.78kg
- Display: 2.3” digit
- LED Color: Red
- Mounting Options: 2U Rack-mounted
- Viewing Distance: 50 feet - 15 meters
- Power Supply: 110-240V AC/ 0.7A
- Operating Temperature: -10°C to 70°C
- Operational Humidity: 90% maximum, non-condensing

Features

- Time is automatically set by Simple Network Time Protocol(SNTP)- no master clock or serial connection required.
- Static IP or DHCP addressing
- Display time in 12 or 24 hours format
- Supports any time zone.
- Supports countdown function
- Automatic daylight saving time
- Environmentally friendly: the light intensity of the digits is adjustable by the software

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Synchronized Time Systems

- Provides NTP server configuration.
- If connection to NTP server is lost the clocks will continue to run on the built-in time base. When the connection is restored it will synchronize automatically.

5.4. Digital IP Clocks for Indoor Use- GTD369 (NTP Wi-Fi)

Features

- Available with 4" digits, 4 digit display or 6 digit display
- Red display standard; Optional White, Blue, Green, Amber, Yellow displays
- Time is automatically set by Simple Network Time Protocol(SNTP)- no master clock or serial connection required
- Supports Wi-Fi- **no need of network cable distribution.**
- Static IP or DHCP addressing
- 12 or 24 hour display
- Automatic Daylight Saving Time change (if applicable)
- Adjustable brightness (brilliant, bright, normal, dim, off)
- Capability to receive realtime countdown command
- If connection to NTP server is lost the clocks will continue to run on the built-in time base. When the connection is restored it will synchronize automatically.
- The clock features time loss notification by having a light on on the right lower corner
- Can be single sided (has one display) or double sided (has two displays)



Single-sided



Double-sided



Ceiling Mounting



Wall Mounting

Additional Highlights



Capable of interface with:

- Temperature and/ or humidity sensor
- Bell Relay

6. Analog NTP Clocks

6.1. Analog NTP Clocks- GTD360 (NTP PoE)

Specifications



Picture		
Model	GTD360-SA	GTD360-BP
Dimensions	Diameter: 38cm, Height: 5.1cm	Diameter: 34.8cm, Height: 7cm
Weight	1.1kg	0.8kg
Case	Aluminum in Silvery	Plastic in Black
Accuracy	+/- approximately 1 second	
Operating Temperature	-10°C to 70°C	
Operational Humidity	90% maximum, non-condensing	
Mounting Option	Surface	
Certification	CE, FCC, RoHS	

Features

- Time is automatically set by Simple Network Time Protocol(SNTP)- no master clock or serial connection required
- Uses PoE (Power over Ethernet) for easy installation and operation
- Static IP or DHCP addressing
- Automatic Daylight Saving Time change (if applicable)- No master clock required

6.2. Analog NTP Clocks- GTD361 (NTP Wi-Fi)

Specifications

Picture		
Model	GTD361-SA	GTD361-BP
Dimensions	Diameter: 38cm, Height: 5.1cm	Diameter: 34.8cm, Height: 7cm
Weight	1.1kg	0.8kg
Case	Aluminum in Silvery	Plastic in Black
Mounting Option	Surface	



Technical Data

Design:	Single- sided for surface wall mounting
MTBF:	50000 hours
Accuracy:	+/- 1 second
Synchronization:	NTP
Wi-Fi frequency:	2.4GHz
Supports:	IEEE802.11 b/g/n
Encryption:	WEP/ WPA-PSK/ WPA2-PSK
Receiving sensitivity	802.11b:-86d8m(11Mbps); 802.11g:-71d8m(54Mbps)
Certifications:	CE, FCC, RoHS, ISO9001

Network

Protocols supported:	NTP, HTTP, FTP
NTP protocol modes:	C/S mode
IP address assignment:	DHCP
Transport protocol:	TCP/ IP
Device management:	Web- based (requires web browser)

Power supply

Battery:	2 x 1.5V size LR6
Average life of battery	12 months

Environmental

Operating temperature:	-5°C to 55°C
Operating humidity:	10%-95%, non-condensing

Features

- Time is automatically set by Simple Network Time Protocol(SNTP)- no master clock or serial connection required.
- Supports Wi-Fi- no need of network cable distribution.
- Supports any time zone.
- Automatic Daylight Saving Time
- Provides NTP server configuration.
- If connection to NTP server is lost the clocks will continue to run on the built-in time base. When the connection is restored it will synchronize automatically.

We reserve the right to make changes at any time.