NTP 6DT - NTP PoE Clock with Date & Text Display

Time Synchronization by NTP

Powered by PoE (Power over Ethernet)

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). 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.

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.

Technical Specifications

General

Display: 2.3" digit (56mm character), 8*8 dot matrix 8mm high)

Viewing Distance: 50 feet (15 meters)

Accuracy: +/- approximately 20 milliseconds

Mounting Options: Surface, Pendant, Cantilever Time

Format: 12- or 24-hour display

LED Color: Red

Network

Signal Input: (S)NTP via RJ45 Connector

Data Protocols: NTP, SNTP
Routing Protocols: IPv4
Compatibility: Ethernet version 2/IEEE802.3af
Ethernet: Supports 10/100 BASE-T (RJ45) connections
IP Address Assignment: Static IP address or dynamic (DHCP)
Additional Info: Supports DNS
Device Management: Software

Power Supply
Input Voltage: 12 V DC
                          Or PoE (IEEE 802.3 af), less than 13 W

Environmental
Operating Temperature: -10°C to 60°C

Operating Humidity: 90% maximum, non-condensing

Housing
Case Material: Metal, Stainless Steel (SS304)
Case Color: Metal in black or white, stainless steel in grey
Dimensions: 43cm*15.5cm*6.3cm
Weight: 2kg

Compliance: CE, FCC, RoHS, ISO

Features
• Available with 2.3" digits, can display calendar or English text (less than 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
• 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.
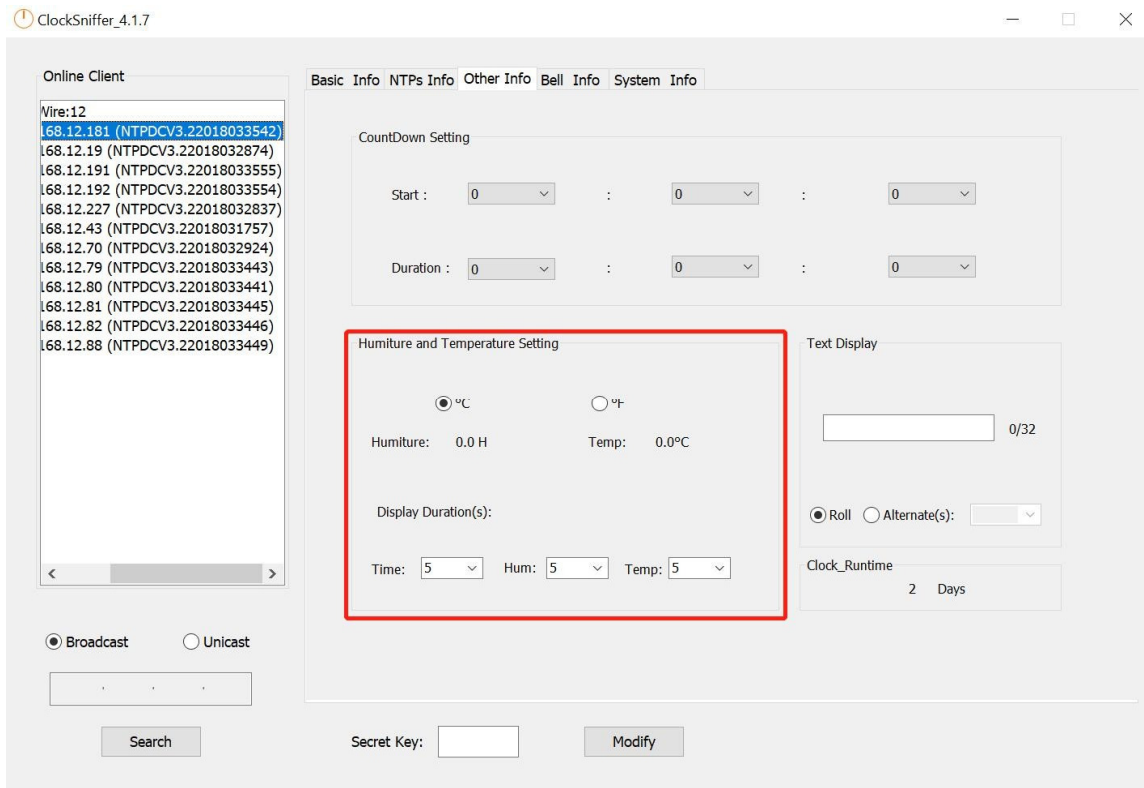• The clock features time loss notification by having a light on the right lower corner

Optional
Capable of interface with:
(1) Temperature and/ or humidity sensor

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We can add a sensor to the clock then it can display time, temperature, humidity alternately:
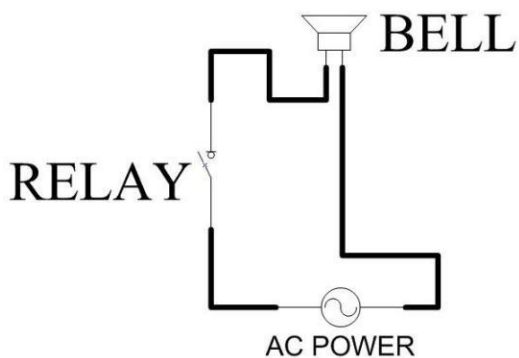

Humiture and Temperature Setting by Software

(2) Built-in bell relay

We can add a built-in bell relay to the clock. Then the clock can be connected to a bell. The bell can be programmed to ring at 30 different moments using the management software.
The voltage and current of the bell should be ≦ 5A 30VDC, or ≦5A 250VAC.

Connection

Connector

ClockSniffer_4.1.7   —   ☐   ✕

Online Client

Wire:12
168.12.181 (NTPDCV3.22018033542)
168.12.19 (NTPDCV3.22018032874)
168.12.191 (NTPDCV3.22018033555)
168.12.192 (NTPDCV3.22018033554)
168.12.227 (NTPDCV3.22018032837)
168.12.43 (NTPDCV3.22018031757)
168.12.70 (NTPDCV3.22018032924)
168.12.79 (NTPDCV3.22018033443)
168.12.80 (NTPDCV3.22018033441)
168.12.81 (NTPDCV3.22018033445)
168.12.82 (NTPDCV3.22018033446)
168.12.88 (NTPDCV3.22018033449)

Basic Info | NTPs Info | Other Info | Bell Info | System Info

BELL1 BELL2 BELL3

Event	Start Time			Days							Durations(s)
☐ 1	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 2	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 3	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 4	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 5	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 6	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 7	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 8	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 9	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄
☐ 10	0 ⌄ : 0 ⌄ : 0 ⌄			☐Sun ☐Mon ☐Tue ☐Wed ☐Thu ☐Fri ☐Sat							⌄

Clean

◉ Broadcast   ○ Unicast

[.   .   ]

Search

Secret Key: [   ]   Modify

Bell Setting by Software