

# IP (PoE) Synchronized Clocks

Leverage Your Network for Time Display



## Features

- Synchronize clocks to computer networks, voice and video systems, telephony, security systems, building automation, access control, fire alarms, electronic record systems, etc.
- Power over Ethernet, IEEE802.3f
- 2.5" and 4", 4- and 6-digit clocks
- 12" and 16" analog clocks
- Each clock synchronizes to network time server via network time protocol (NTP)
- Network management through web interface
- Automatic configurable bi-annual daylight savings time/summer time adjustment
- Made in the USA
- E-mail alerts for sync and NTP status updates
- Monitoring software included

Synchronizing critical operations is made easier and more effective with network-based IP Synchronized Clocks. For ease of installation and management, the display clocks meet the needs of the network-centric evolution of facility infrastructure. It leverages the wired network infrastructure of a facility to allow for reliable clock synchronization over an existing LAN/WAN.

Each analog or digital clock acquires an IP address via DHCP, or is configured for a static address. A web browser interface allows easy configuration of time zone, DST/summer time adjustment, and display (digital clocks only). Each clock is configured to receive time from up to 10 network time servers, such as Spectracom's SecureSync® or NetClock® GPS network time server, supporting redundancy.

Global monitoring software allows management of all clocks on the network. View the communication status, IP addresses, and elapsed run-time duration for each clock. You can even edit a specific clock's settings or apply settings to the entire clock system through one location.

Several power options are available including power over Ethernet per the IEEE802.3f specification. If the 48 VDC is not available through the network, then a PoE power injector is available to supply power from 110/220 VAC.

## Communications

### Network Port

RJ-45, 10/100-baseT

### Protocols

- Simple Network Time Protocol (SNTP) for synchronization
- DHCP/BOOTP for automatic acquisition of network address, name servers, and time server configuration
- HTTP for browser-based configuration and management

### Time Servers

10 possible NTP servers to poll

### Email Alerts

Display failures, power failures or resets, uncommon time drifts, count up/countdown activation

## Microprocessor Control

- Nonvolatile memory saves configuration settings (lithium battery back-up)
- Configuration through web interface
- Time zone offset, bi-annual DST correction

## Temperature

**Operating:** 0 C to +45 C

**Storage:** -15 C to +75 C

## Warranty

Two-year limited warranty<sup>1</sup> from the manufacturer

<sup>1</sup>The warranty period may be dependent on country.

## Clock Specifications

### Analog

- 12" or 16" diameter clock face
- Dial: Arabic numerals, 12- or 24-hour format, durable polystyrene
- Housing: black smooth surface ABS
- Crystal: shatterproof, side-molded, polycarbonate
- Hands: red second hand; black hour and minute hands
- Time to synchronize hands: 5-minute maximum
- Quiet operation
- Diagnostics: rear panel test buttons and LED indicates last sync, signal strength, mechanical test, battery level

### Digital

- 4 or 6 red digits, 2.5" or 4.0"
- 100 ft. visibility (2.5")
- 250 ft. visibility (4.0")
- 12- or 24-hour mode
- 4 brightness settings
- Loss of communications alert
- Ability to set dimming schedule

## Analog Clock Size (Housing Dimensions)

### 12" Analog:

12.65" dia. x 2.18" D

### 16" Analog:

16.65" dia. x 2.18" D

## Digital Clock Size (Housing Dimensions)

### 2.5", 4 Digit:

10.31" L x 4.69" W (26.19 cm x 11.91 cm)

### 2.5", 6 Digit:

13.56" L x 4.69" W (34.44 cm x 11.91 cm)

### 4.0", 4 Digit:

13.31" L x 6.75" W (33.8 cm x 17.15 cm)

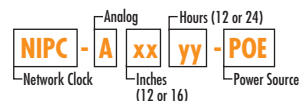
### 4.0", 6 Digit:

18.31" L x 6.75" W (46.5 cm x 17.15 cm)

## Agency Approvals

CE (pending), UL (pending), cUL (pending)

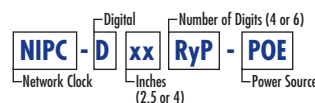
## Ordering Information



Example:

NIPC-A1224-POE = PoE-Ready, 12-Inch, 24-Hour Analog Clock

NIPC-A1612-POE = PoE-Ready, 16-Inch, 12-Hour Analog Clock



Example:

NIPC-D25R6P-POE = 2.5-Inch, 6-Digit, PoE-Ready Digital Clock

NIPC-D40R6P-POE = 4.0-Inch, 6-Digit, PoE-Ready Digital Clock

PoE-Ready clocks do not include a power injector which is available separately (order model number NIPC-INJEC-POE)

## Double-Sided Displays

Mount two analog or two digital clocks back to back for wall or ceiling mounting. See Wireless and PoE Clock Options and Accessories datasheet.

## Network Time Server

NetClock network time server

Consult factory for details

## PoE Power Injector

Available for PoE-Ready clocks on networks without power over ethernet

## Network-Based Synchronized Clocks

Clocks synchronize to one or more time servers over the network. Each clock can be individually and globally managed from a web browser anywhere on the network.

