

IP (PoE) Synchronized Clocks

Leverage Your Network for Time Display



- 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
- E-mail alerts for sync and NTP status updates
- Monitoring software included

Orolia offers network-based IP synchronized clocks from Sapling. 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 Orolia'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.

The clocks are powered 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 Base-T

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

Power Draw

- TCXO: 40W normal (50W start-up)
- OCXO: 40W normal (50W start-up)
- Rb: 50W normal (80W start-up)

Temperature

Operating: 0 °C to +45 °C

Storage: -15 °C to +75 °C

Warranty

Two-year limited warranty¹ from the manufacturer

¹The 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 or green 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

UL, cUL

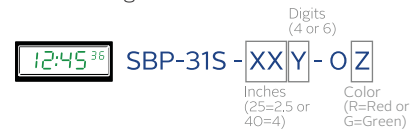
Ordering Information



Example:

SAP-4BS-12R-O-M = PoE-Ready, 12-Inch, 24-Hour Analog Clock

SAP-4BS-16R-O = PoE-Ready, 16-Inch, 12-Hour Analog Clock



Example:

SBP-31S-256-OR = 2.5-Inch, 6-Digit, Red, PoEReady Digital Clock

SBP-31S-406-OG = 4.0-Inch, 6-Digit, Green, PoE-Ready Digital Clock

PoE-Ready clocks do not include a power injector, which is available separately (order model number A-POE-INJECTOR-O)

Double-Sided Displays

Mount two analog or two digital clocks back to back for wall or ceiling mounting.



Digital Clock Mount:
Model SAB-1BD-OOS-O
universal double mount



Analog Clock Mounts:
Model SAH-4BD - XX R-O

Network Time Server

SecureSync or NetClock network time server
Consult factory for details.

PoE Power Injector

Model A-POE-INJECTOR-O: Available for PoEReady 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.

