



NetClock® Wireless Clock System

Wireless Mesh Time Network

Low Power/Narrow Bandwidth Option



FEATURES

- Synchronize clocks to computer networks, voice and video systems, telephony, security systems, building automation, access control, fire alarms, electronic record systems, etc.
- Wireless, battery-powered analog (24/110 VAC also available)
- Energy efficient—5-year battery life
- Each clock acts as a transmitter and a repeater for a robust wireless mesh network
- Proven 920–925 MHz frequency-hopping technology for clear signal and to eliminate any interference issues
- No FCC license required
- Microprocessor-based clock with automatic calibration
- Built-in diagnostic mode for easy maintenance
- Made in the USA

APPLICATIONS

- Hospital/Healthcare/Medical Center facilities
- Higher Education campuses
- Manufacturing/Industrial complexes
- Government buildings
- Transportation centers

Spectracom's wireless clock system offers a time display option for organizations with time-sensitive operations. The system uses the industry-leading NetClock®/GPS network time server as its master clock for traceability to UTC (Coordinated Universal Time). Legally Traceable Time® from the NetClock is broadcast by a transmitter, synchronizing the displays to all other network systems and devices throughout the facility.

This innovative system offers an easy, cost-effective solution by providing accurate, synchronized time displays without expensive, disruptive installation procedures. Because there are no wiring requirements, install times are drastically reduced, and it's ideal for renovation projects—no need to worry about asbestos issues or messy, in-wall electrical installation work—as well as new construction.

Each Spectracom clock can receive and transmit the synchronization signal from and to another clock, creating a robust and efficient wireless mesh network. Such a system provides significant advantages by improving signal strength and coverage territory as more clocks are added.

The system is easily scalable as additional needs develop in the future. In applications across a large campus, Spectracom offers an optional repeater to maintain the signal.

The transmitter connects directly to the serial port of the NetClock or acts as an NTP client and can synchronize to the NetClock anywhere on the local or wide area network.

Spectracom's wireless clocks transmit a stream of data every minute from 24/110/220 VAC versions and every four hours from battery-powered units. The clocks are compact, energy efficient, and reliable. The wireless clocks are FCC Compliant, part 15, Section 15.247.

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PERFORMANCE

OPERATING FREQUENCY:

920–925 MHz frequency-hopping technology. No FCC license required.

RF POWER OUTPUT:

Transmitter: 27 dBm
Repeater: 27 dBm
Clock: 8 dBm

INPUT SENSITIVITY:

–103 dBm

CLOCK SPECIFICATIONS

ANALOG DISPLAY:

12" or 16" diameter clock face
Dial: Arabic numerals, 12- or 24-hour format, durable
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 indicator, mechanical test

DIGITAL DISPLAY:

2.5" or 4.0" digits
12- or 24-hour mode
2 brightness settings
Loss of communications alert

POWER:

Analog: 2 "D" cell batteries included, or 20 mA @ 24 VAC, or 15 mA @ 110VAC
2.5" Digital: 85 mA @ 24 VAC, or 30 mA @ 110 VAC
4.0" Digital: 190 mA @ 24 VAC, or 45 mA @ 110 VAC

INPUT VOLTAGE:

24V Analog: 7 VAC–28 VAC
110V Analog: 85–135 VAC
24V 2.5" Digital: 12–30 VDC/VAC
24V 4.0" Digital: 16–28 VDC, 14–28 VAC
110V 2.5" Digital: 78 VAC–130 VAC
110V 4.0" Digital: 85 VAC–135 VAC

SIZE/WEIGHT:

12" Analog: 12.65" dia, 2.18" depth/2.5 lbs.
16" Analog: 16.65" dia, 2.18" depth/4.0 lbs.
2.5" 4-Digit Bezel: 4.69" H x 10.31" L/2 lbs.
4.0" 4-Digit Bezel: 6.75" H x 13.31" L/3.5 lbs.

TEMPERATURE RANGE:

Operating: 0° C to +45° C
Storage: –15° C to +75° C

TRANSMITTER AND REPEATER SPECIFICATIONS

ANTENNA LENGTH:

7"

RANGE:

6,500 ft. in open space

POWER:

85–265 VAC, 47–440 Hz, 35W max, 319 mA @ 110 VAC, hardwired
(power cord not supplied)

SIZE/WEIGHT:

2.75" L x 6.75" W x 7.5" D/3.5 lbs.

DISPLAY (TRANSMITTER ONLY):

.56" 6-digit LED

TEMPERATURE RANGE:

Operating: 0° C to +50° C
Storage: –15° C to +70° C

WARRANTY

TWO-YEAR LIMITED

ORDERING INFORMATION

1. Analog Display

12" Battery-powered Analog Clock, 12-hour display, Model NWC-A1212-BAT-LP
12" Battery-powered Clock, 24-hour display, Model NWC-A1224-BAT-LP
12" 24/110 VAC Analog Clock, 12-hour display, Model NWC-A1212-110-LP
12" 24/110 VAC Analog Clock, 24-hour display, Model NWC-A1224-110-LP
16" Battery-powered Analog Clock, 12-hour display, Model NWC-A1612-BAT-LP
16" Battery-powered Analog Clock, 24-hour display, Model NWC-A1624-BAT-LP
16" 24/110 VAC Analog Clock, 12-hour display, Model NWC-A1612-110-LP
16" 24/110 VAC Analog Clock, 24-hour display, Model NWC-A1624-110-LP

2. Digital Display

2.5" 24V Digital Clock, 4 digit, Model NWC-D25R4-024-LP
2.5" 110V Digital Clock, 4 digit, Model NWC-D25R4-110-LP
2.5" 220V Digital Clock, 4 digit, Model NWC-D25R4-220-LP
4.0" 24V Digital Clock, 4 digit, Model NWC-D40R4-024-LP
4.0" 110V Digital Clock, 4 digit, Model NWC-D40R4-110-LP
4.0" 220V Digital Clock, 4 digit, Model NWC-D40R4-220-LP
2.5" 24V Digital Clock, 6 digit, Model NWC-D25R6-024-LP
2.5" 110V Digital Clock, 6 digit, Model NWC-D25R6-110-LP
2.5" 220V Digital Clock, 6 digit, Model NWC-D25R6-220-LP
4.0" 24V Digital Clock, 6 digit, Model NWC-D40R6-024-LP
4.0" 110V Digital Clock, 6 digit, Model NWC-D40R6-110-LP
4.0" 220V Digital Clock, 6 digit, Model NWC-D40R6-220-LP

3. Transmitter

Transmitter, Model TCVR-NTP-1000-LP

4. Repeater

Repeater, Model RPTR-RS-1000-LP

5. Master Clock

NetClock network time server: consult the factory for options

