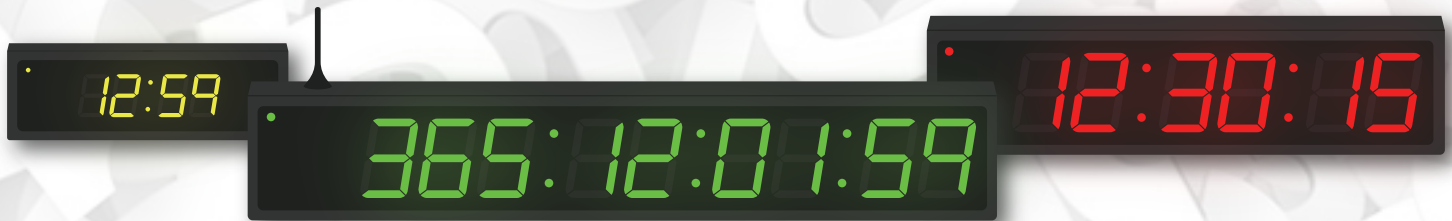


# TIME MACHINES™

2.5" or 4" Digit Height • 4, 6 or 9 Digit Quantity • PoE or WiFi



(Digit colors are for reference only)

## DIGITAL NETWORK CLOCKS - PoE or WiFi



### SYNCHRONIZED, ACCURATE TIME.

TimeMachines® digital clock displays are an integral part of a synchronized timing solution. Our digital NTP PoE/WiFi clock displays function as networked devices without the issues of atomic clocks with reception issues. Each clock display has an IP address on the LAN and uses Simple Network Time Protocol (SNTP) to request time from a primary or backup time source. TimeMachines® displays do not require a master clock for synchronization, but operate as stand alone devices using network based time sources. Accuracy of the synchronized clock system depends upon the accuracy of the configured time sources. Best accuracy and reliability is achieved with a LAN based time server such as the TM1000A or TM2000B from TimeMachines®.



### THE POWER OF POE.

PoE (802.3af) is a recognized standard for delivering power over an Ethernet cable. If VoIP PBX phones are in use, PoE is likely present to provide power, creating a system where a single cable provides both power and time synchronization signals. Using low voltage Cat 5/6 cabling saves on installation costs and maintenance. If existing network equipment doesn't support PoE, an optional power injector is available to convert non-PoE capable network equipment to PoE. It's recommended that an Uninterruptible Power Supply (UPS) be part of the Ethernet network system to maintain clock function during a power outage.

## TIMER FUNCTIONS.

TimeMachines® clocks function as more than just great clocks. The built in up/down timers, and timer programs make them the most versatile timer product on the market. Controllable from our free Windows/MAC software, as well as Android/IOS apps, these clocks can be used for fitness classes, presentation and debate timing, meeting timers, and race timers to name a few. The multi-color RGB digits allow for different colors on the clock display simultaneously.



## DIGITAL NETWORK CLOCKS - PoE or WiFi

### 2.5" AND 4" (DIGIT HEIGHT)

### MULTI-COLOR RGB

# TIME MACHINES™

#### SPECIFICATIONS:

##### GENERAL INFORMATION:

- Cases are black, powder coated 18-gauge steel with acrylic lenses. Clocks are not waterproof, nor intended for outdoor use.
- Clock displays use multi-color RGB, 7-segment LEDs for each digit and discrete LEDs for AM/PM indication. Color can be set to any of the standard presets (Red, Green, Blue, Yellow, Magenta, Cyan, or White). RGB component values can be adjusted with TM-Manager.
- Network connection is required for clock or timer functionality. PoE or WiFi options available.
- Two separate colors can be shown simultaneously. The left most 2 digits (4/6 digit clocks) or 3 digits (9 digit clocks) are independent.
- TM-Manager (Windows/MAC) and TM-Timer (IOS/Android) are free applications supporting setup, monitoring, and controlling multiple clocks simultaneously. Visit [timemachinescorp.com](http://timemachinescorp.com) for more information or to download this software.
- Clocks will operate from -40C to +70C. Humidity non-condensing. Minimum startup temperature -20C.

##### CONFIGURATION and CUSTOMIZATION:

- Configuration of device managed using a web browser. Initial configuration requires DHCP. Static IP or DHCP may be used.
- Uses any SNTP server as a time source. SNTP synchronization frequency can be set for each device.
- Supports multiple time servers, which can be within the LAN or external (Internet-based).
- Loss of network time source will be indicated by blinking digits on the clock.
- Also supported: 24hr modes, time zone, daylight savings time, date display, timer functions, alarms, and auto start timers.

##### PoE SPECIFICATIONS:

- Power: 802.3af 15W (48V). Typical usage 6-10W, based on clock size.
- 2.5" Clocks: 4 digits=4-7W, 6 digit=6-9W, 9 digit=8-11W.
- 4.0" Clocks: 4 digits=6-8W, 6 digit=7-10W, 9 digit=9-12W.

##### WiFi SPECIFICATIONS:

- Power: 12V, 1A, 90-240VAC, 50/60Hz, International adapters included.
- WiFi Antenna: 2.2 dBi dipole, magnetic mount, RP-SMA connector, 1.4 oz.
- Frequency: 2.4GHz Band ONLY.
- Security Support: WEP, WPA, or WPA2 with pre-shared keys. WPA2 Enterprise is NOT supported.

Due to WiFi systems variations and signal coverage, location-specific compatibility testing is recommended before bulk purchase.

#### CLOCK MOUNTING OPTIONS:

##### SINGLE-SIDED CLOCKS:

**2.5" Clocks** - Has cutouts for wall mounting using screws & plastic drywall anchors (included). We offer 2.5" rack ear brackets for mounting 2.5" clocks in either 4 or 6 digit format, in a standard 19" equipment rack. Clocks take up 3RU in equipment rack.

\*Brackets do not fit 4" clocks, which are too large for mounting into an equipment rack.



**4" Clocks** - Our T-Track Ceiling Mount Kit consists of 3D printed brackets allow mounting our 4" clocks to any surface at virtually any desired viewing angle.



##### DOUBLE-SIDED CLOCKS:

**2.5" and 4" Clocks** - 1) Drop mount plate (included), screws and drop mount pipe not included due to variability of installation.

2) Ceiling mount plate, 3) Side mount plate.

Double-sided clocks use a single power and/or network drop for both sides of the display. No need to run a second set of cables.



1. DROP MOUNT PLATE



2. CEILING MOUNT PLATE



3. SIDE MOUNT PLATE

\* Warranty coverage is one year from date of shipment. TimeMachines® liability under this warranty is limited to repairing or replacing the defective equipment, at TimeMachines® discretion. TimeMachines® will not cover any claim if it is found that the product has been subjected to abuse, used in a manner for which it is not designed or acts of nature beyond TimeMachines® control such as, but not limited to, lightning strikes, power surges, misuse, neglect, or if unauthorized repairs have been made or attempted by anyone other than authorized personnel by TimeMachines®. The standard warranty can be extended for an additional year with the purchase of the optional Service Agreement. In no event will TimeMachines® be liable for any indirect, special, incidental, or consequential damages from the sale or use of this product. This disclaimer applies both during and after the term of the warranty. TimeMachines® disclaims liability for any implied warranty, including implied warranties of merchantability.

\* Specifications subject to change without notice. Check [www.timemachinescorp.com](http://www.timemachinescorp.com) for downloads/updates.

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