



Mesh Network vs. PoE vs. WiFi Synchronized Clocks Systems

BRG Digital Mesh Network Time Distribution

Wall clocks require no setup or configuration required. Just insert the batteries and the clock moves the hands to the correct time.

No IT Department services required.

Very low power operation

Low to moderate price point

Uses common AA Alkaline or Lithium batteries

Simple network operation

No PoE or Network cables or additional PoE network switches required.

Self healing mesh network. Every clock automatically propagates the time signal.

Two way communications

Remote temperature sensor available

2.4 GHz ISM frequency band

Uses GPS, CDMA or Network Time Protocol

Power over Ethernet (PoE) Network Time Distribution

Configure IP address, network mask, gateway address, NTP IP addresses, local time rules, and other operating parameters

Requires IT services to manage the network.

Network cables must be run to every clock, may require additional PoE network switches.

Very high price point (more than twice the price of mesh network clocks)

Clock operation dependent upon power supplied by the network switches and backup battery system.

Complex network operation

PoE requires network cable to be run to every clock.

Cables required at every clock location

Two way communications

Remote temperature sensor available

Hardwired

Uses Network Time Protocol

WiFi or Computer Network Time Distribution

Configure IP address, network mask, gateway address, NTP IP addresses, local time rules, and other operating parameters

Requires IT services to manage the network.

Relatively high current operation does not lend itself well to battery operation

Very high price point (more than twice the price of mesh network clocks)

Uses larger, more expensive Lithium C or D cell battery packs required, which are not readily available.

Complex network operation

No PoE or Network cables or additional PoE network switches required.

Multiple access points or antenna distribution system required in most cases

Two way communications

Remote temperature sensor available

2.4 GHz ISM frequency band

Uses Network Time Protocol