

# When is a Wireless Clock System Right for Your Facility?

## A White Paper by The Sapling Company



Here at Sapling, we manufacture 4 different synchronized clock systems; Wired, Wireless, IP, and TalkBack Wireless. Each facility's clock system need is different and we strive to have a technology to fit nearly every situation. Let us show you the highlights of our Wireless System featuring our patented frequency-hopping technology to help you decide if our wireless system is the best for your facility.

#### When Would a Wireless System be Best?

We offer a wireless clock system that is truly a technological advance for clock systems. The clocks operate on patented 915-928 MHz frequency-hopping technology. This technology allows multiple secondary clocks to operate on the same frequency range without interfering with any additional wireless products you may have. Our wireless clock system begins with the master clock, which can receive time from any (S)NTP/NTP server or GPS satellite. The master clock then sends out a signal to the secondary clocks. Once the secondary clocks receive the signal, they have the ability to retransmit that signal to surrounding clocks, ensuring that all timekeeping devices display the accurate time, regardless if they can receive the original signal of the master clock. By having a repeater in each wireless clock to send the signal to neighboring clocks both down a hallway or on a different level, you ensure signal range and system reliability. This ability also eliminates the cost for additional repeaters and transmitters by creating a mesh network and can be used in larger facilities without having to run complicated wiring.

### What are Some Of the Features of Sapling's Wireless System?

- Each Clock Has A Repeater Built-In Since each clock has a repeater built right into each unit, there is no need for extra high powered transmitters. Each clock receives the wireless signal and sends out the time to its neighboring clock, making Sapling's system unique and extremely reliable.
- Receives Signal From Multiple Paths Since each clock has a repeater built-in, the wireless signal can be received from any clock in the signal's radius.



- Patented Frequency-Hopping Technology This patented technology allows each clock to frequency hop the transmission to all of the surrounding clocks, enabling it to receive the correct time, even if there is interference on any of the frequencies.
- Web-Based Master Clock Program our web-based SMA Series Master Clock from anywhere with an internet connection. Its user-friendly web interface is simple to use and can be setup within minutes.
- Economical Multi-Building Campus By including Sapling's Network Repeaters, we provide an economical, multi-building solution without the added expense of purchasing separate master clocks for each building.
- Multiple Power Options Our battery operated analog clocks offer total freedom for mounting, in addition, there are options for 24V, 110V, or 220V power for both the analog and digital wireless clocks.
- No FCC License With Sapling's wireless clocks operating on an open frequency range, there is no need to purchase costly FCC licenses, saving you thousands of dollars over the life of the system.

## Why Would You Choose Sapling's Wireless Clock System?

Sapling's Wireless Clock System is the embodiment of innovation and reliability. Eliminating wiring throughout an entire facility can save you thousands of dollars on installation and also allows for retrofitting of an existing installation. While most wireless systems are limited to the range of the transmitter, Sapling's is not.

There are additional advantages to Sapling's wireless clocks that can save you money. This comes from the system itself. By having a wireless clock system installed on the premises, all clocks not only have accurate, synchronized time but have the ability to interface with other systems as well. In many ways, these capabilities can save organizations thousands of dollars over time. With the ability to schedule relays, via the master clock, this system helps an organization save money by shutting heating, air conditioning, lighting, and other systems on or off at desired times. The system can also automatically correct for Daylight Saving Time.

When it comes to a synchronized clock solution for you facility, Sapling's wireless clock system is an affordable and reliable solution. If having accurate time is a necessary aspect of your organization, then Sapling offers a system that will save you thousands in the long run and still remain inexpensive during the upfront costs of purchase and installation. Sapling's wireless clock system will remain synchronized throughout a building or campus, require little to no maintenance and reduce energy use throughout a facility.