

SLD Premium Large Digital Clock

The secondary clock shall be a Sapling SLD Premium Large Digital Clock. It shall have an LED numeral display with digits measuring either 6.0", 9.0", or 12.0" high. The clock shall be available in both four (4) and six (6) digits. The display shall use either red, green, white, or amber LEDs, depending on the type of display that was ordered. The clock will have four (4) levels of adjustable brightness. When the input is lost, the colon on the display of the clock shall flash. It shall be capable of displaying time in a 12 or 24 hour display format.

The clock shall have data LEDs on the circuitry board that light up when the clock receives data. The clock shall be configured via a connection through an 802.11b/g/n Wi-Fi transponder, or through a cabled LAN connection via a CAT5, CAT5e, CAT6, or CAT6a cable connected through an RJ45 port. The Wi-Fi transponder shall be capable of using WEP, WPA, WPA2-PSK, or WPA2-Enterprise encryption protocols when connected to a WLAN, and EAP-MSCHAP with either EAP-FAST, EAP-TTLS, or EAP-PEAP authentication protocols when establishing a WPA2-Enterprise connection. The clock configuration shall be entered through a series of HTML webpages delivered over HTTP to a web browser such as (but not limited to) Internet Explorer, Microsoft Edge, or Google Chrome.

The clock shall receive time data from at least one of the following sources: an NTP or SNTP server, a Sapling SMA Series Master Clock, or a GPS satellite. Time data shall be delivered to the clock through one of the following methods: IP over Wi-Fi LAN, IP over CAT5/5e/6/6a cable, Sapling Proprietary Wireless protocol, Sapling Proprietary Wireless TalkBack protocol, Sapling's Proprietary 2-Wire Communication protocol, Sapling's proprietary RS485 protocol, a wired Sync-wire protocol (specifically 59-minute correction, 58-minute correction, National Time and Rauland, Rauland Digital, Once a Day Pulse, or Dukane Digital protocol) or Wireless GPS transmission.

The clock will be powered by one of the following: 110 Volts Alternating Current, 230 Volts Alternating Current, 24 Volts Alternating Current, or 12 Volts Power-over-Ethernet (PoE). When power is lost, the clock will rely on a small battery and quartz timer to keep track of (but not display) the time. The clock shall have circuit components which allow it to interface with any or all of the following accessories: the Sapling Elapsed Timer Control Panel, Sapling's Temperature Sensor, and Sapling's Buzzer. Additionally, the clock shall have built-in relays which allow it to accept other wired time protocols such as 59-minute correction, 58-minute correction, National Time and Rauland, Midnight Reset, and Dukane.

The clock shall have an aluminum case which can be mounted to a wall or support pole using one or more mounting pieces. The digital clock housing shall

be designed and molded so that it can be attached to a

Sapling double-mount pole. If the customer ordered an outdoor version of the clock, it should have an Ingress Protection Rating of 66.