# 🤅 sapling

# SMA 2000 Series Master Clock (V2)



## Highlights

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- LED display for a clear, accurate readout
- \*NEW\* (S)NTP Input Capability
  - Up to ten server addresses can be pre-programmed into the unit for continuous, accurate synchronization (with web interface software upgrade)
  - DHCP Capable
- Interfaces with other systems
  - Interfaces with 59 and 58 minute correction, National Time and Rauland, as well as Dukane digital
- 12 or 24 hour mode
- Automatic bi-annual daylight savings time changes (when used as a primary master clock)
- \*NEW\* Bias seconds output
  - Adjust the time plus or minus a few seconds or minutes to fit your application, while still receiving an input from another source
- RS485 input and output for time correction and synchronization
- Two relays for simultaneous correction of two synchronous-wired clock systems
- Microprocessor based
- Ten year battery backup for timekeeping

## **Optional Features a la Carte**

- GPS input
- Wireless Transmitter/Repeater for correction of the SAL-2 series analog clocks or SBL series digital clocks
- \*NEW\* SNTP Server
  - With this software upgrade, the new SMA Master Clock can be used as a SNTP server to interface with other devices
- \*NEW\* Web interface software upgrade
  - Extremely intuitive graphical user interface that allows the user to configure all of the settings of the SMA through a simple web interface
  - Control of all of the IP settings



## SMA 2000 Series Master Clock (V2)

## **Specifications**

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- Time base:
- Voltage input:
- Display:
- Color:
- Housing:
- Temperature range
  Operating:
  Shelf:
- Calendar:
- Inputs:
- Standby time keeping:
- Memory:
- Outputs:
- Optional outputs:
- Housing dimensions (LxWxD):
- Mounting:
- Weight:
- Includes:

• Compliance:

- Crystal 85 - 265 VAC, 50/60 Hz .56" (1.42 cm) LED display Black Smooth surface metal case
- 0°C 45°C -15° - 70°C Built-in calendar with leap years GPS (optional), SNTP, Wireless repeater, RS485, 58 minute correction, 59 minute correction, National Time and Rauland, Dukane digital Ten (10) years Non-volatile EEPROM RS485 and 2 clock circuits Sapling Wireless Communication (with transmitter option) 11" x 17.5" x 1.75" (27.94 cm x 44.45 cm x 4.45 cm) Wall mount or rack mount 6.5 lbs. (2.95 kg) 1 - 6 foot (1.82 m) power cord 1 - Wall mount kit (wall mount only) 1 - Remote antenna (rack mount and transmitter option only)

1 - 75 foot (22.86 m) GPS cable (with GPS option)

UL, cUL pending - FCC approved, part 15 section

1 - Dome antenna (with GPS option)

**OPTIONS** - Transmitter

- Input sensitivity:
- RF signal output:
- Transmission frequency:
- OPTIONS GPS
- Antenna:
- Antenna dimensions:

-103 dBm

- 30 dBm (1 watt)
- 915 928 MHz frequency-hopping
- technology

Thread mount bullet on 3/4" conduit Diameter: 3.04" (7.72 cm) Height: 2.94" (7.47 cm)

## **Ordering Information**



15.247

### SMA 2000 Series Software Upgrades

#### Web Interface

SMA-200-WEBI-0

#### SNTP Server SMA-000-SERV-0

Master clock can act as a SNTP Server

Master clock can be controlled via the web

#### Examples:

SMA-2R0-1000-1: SMA-2S0-1100-1: Rack mount, with transmitter option Surface mount, with transmitter and GPS option