

## SMA 2000 Series Master Clock (V5)

### Features:

- LED display for a clear, accurate readout
- (S)NTP Input Capability
  - Up to ten server addresses can be pre-programmed into the unit for continuous, accurate synchronization
  - 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)
- 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
- Web interface software
  - 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



### Optional Features a la Carte:

- GPS input
- Wireless Transmitter/Repeater for correction of the SAL-2 series analog clocks or SBL series digital clocks
- (S)NTP Server
  - With this software upgrade, the new SMA Master Clock can be used as a (S)NTP server to interface with other devices

## Specifications:

- Time base: Crystal
- Voltage input: 100 - 240 VAC, 50/60 Hz
- Display: .56" (1.42 cm) LED display
- Color: Black
- Housing: Smooth surface metal case
- Temperature range
  - Operating: 0°C - 45°C
  - Shelf: -15° - 70°C
- Calendar: Built-in calendar with leap years
- Inputs: GPS (optional), (S)NTP, Wireless repeater, RS485, 58 minute correction, 59 minute correction, National Time and Rauland, Dukane digital
- Standby time keeping: Ten (10) years
- Memory: Non-volatile EEPROM
- Outputs: RS485 and 2 clock circuits
- Optional outputs: Sapling Wireless Communication (with transmitter option)
- Housing dimensions (LxWxD): 11" x 17.5" x 1.75" (27.94 cm x 44.45 cm x 4.45 cm)
- Mounting: Wall mount or rack mount
- Weight: 6.5 lbs. (2.95 kg)
- Includes:
  - 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)
  - 1 - Dome antenna (with GPS option)

### OPTIONS - Transmitter

- Input sensitivity: -112 dBm
- RF signal output: 30 dBm (1 watt)
- Transmission frequency: 915 - 928 MHz frequency-hopping technology (US and Canada only)  
2.4 GHz frequency for international only

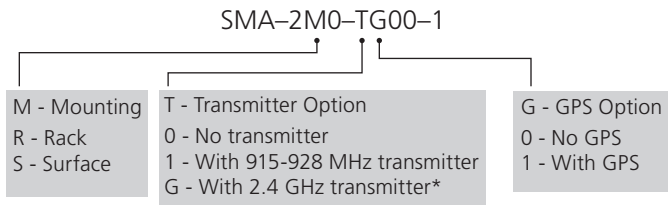
### OPTIONS - GPS

- Antenna: Thread mount bullet on 3/4" conduit
- Antenna dimensions: Diameter: 3.04" (7.72 cm)  
Height: 2.94" (7.47 cm)
- Compliance: UL/cUL listed  
FCC part 15 B "class B digital devices"  
CE Compliances: EMC, LVD



## Ordering Information

### SMA 2000 Series Master Clock



#### Examples:

- SMA-2R0-1000-1: SMA 2000 Series, rack mount, with 915-928 MHz transmitter, No GPS  
 SMA-2S0-G100-1: SMA 2000 Series, Surface mount, with 2.4 GHz transmitter, with GPS

\*2.4 GHz frequency range is only available for use outside of the United States.

### SMA 2000 Series Software Upgrades

#### (S)NTP Server

SMA-000-SERV-0: Master clock can act as a (S)NTP Server

\*specification sheets may change without prior notice