Synchronized Clock Systems

## SMA 2000 Series Master Clock (V8)

## Features:

- LED display for a clear, accurate readout
- Available in Rack or Wall Mount
- (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 Saving 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 3000 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:
- Voltage input:
- Current Consumption:
- Power Consumption:
- Display:
- Color:
- Housing:
- Temperature range Operating: Shelf:
- Calendar
- Inputs:

Crystal
85 VAC - 264 VAC, 50/60 Hz
0.2 A at 120 V and 0.1 A at 230 V

20 Watts
.56" ( 1.42 cm ) LED display
Black
Smooth surface metal case
$0^{\circ} \mathrm{C}-45^{\circ} \mathrm{C}$
$-15^{\circ}-70^{\circ} \mathrm{C}$
Built-in calendar with leap years
GPS (optional), (S)NTP, 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)
$11^{\prime \prime} \times 17.5^{\prime \prime} \times 1.75^{\prime \prime}(27.94 \mathrm{~cm} \times 44.45$ $\mathrm{cm} \times 4.45 \mathrm{~cm}$ )
Wall mount or Rack mount
$6.5 \mathrm{lbs} .(2.95 \mathrm{~kg}$ )
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)
1 - Dome antenna (with GPS option)

## OPTIONS - Transmitter

- Input sensitivity: -112 dBm
- RF signal output: 30 dBm (1 watt)
- Transmission frequency: Either $915-928 \mathrm{MHz}$ or 2.4 GHz frequency-hopping technology

OPTIONS - GPS

- Antenna: Thread mount bullet on $3 / 4^{\prime \prime}$ conduit
- Antenna dimensions: Diameter: 3.04" (7.72 cm) Height: 2.94" (7.47 cm)
- Ethernet Speed: 10/100 Mbps Full Duplex
- Ethernet Port:
- Compliance:

FCC part 15 B "class B digital devices" CE Compliances: EMC, LVD

- Housing dimensions (LxWxD):
- Mounting:
- Weight:
- Includes:


## Ordering Information

SMA 2000 Series Master Clock


SMA 2000 Series Software Upgrades
(S)NTP Server

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

## Examples

$\begin{array}{ll}\text { SMA-2R0-1000-1: } & \text { SMA } 2000 \text { Series, rack mount, with } 915-928 \mathrm{MHz} \text { transmitter, No GPS } \\ \text { SMA-2S0-G100-1: } & \text { SMA } 2000 \text { Series, Surface mount, with } 2.4 \mathrm{GHz} \text { transmitter, with GPS }\end{array}$
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Synchronized Clock Systems

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