

# Sentor Technical Specifications

## HARDWARE

**MOUNTING:** Lockable 19" Rack /Wall mounted 2 RU or IP 65 Watertight Housing.

**FRONT PANEL:** 19" front panel mount with graphics.

**REAR PANEL:** 7 knockout circular blocks for wiring and an optional 9 pin D connector for RS 232.

**BACK PLANE:** 3 knockout circular blocks for wiring

**POWER SUPPLY:** Externally mounted 240/110-volt transformer to 16 volt AC, 3 amp.

**RACK SECURITY:** Optional Tamper Switch activated on unit removal.

## DIMENSIONS:

Front Panel	- 19 inch (483mm) W, - 3 7/16 inches (88mm) H.
Case	- 17 1/8 inches (436mm) W - 3 1/8 inches (80mm) H - 13 3/4 inches (350mm) D.

## TECHNICAL SPECIFICATIONS

**INPUTS:** 8 DIGITAL clean contact optically isolated  
8 GENERAL PURPOSE Programmable Analogue or Digital Inputs.

Each general input can be programmed to be; clean contact digital input, Protected Loop with double 10k EOL resistors,

- 0-1 V analogue Input
- 0-10 V analogue Input
- 0-30 V analogue Input
- 0-20 mA & Protected Loop
- Lineal Input
- Non-Lineal Input
- Temperature sensor Input

Analogue Inputs are 9 bit D-A with sample rate of  $\leq 20$  times per second. The accuracy for analogue inputs is better than 0.5% .By adding ST317 expansion I/O cards to the system the total number of inputs can be 80 per Controller.

**OUTPUTS:** 8 SPCO (single pole double throw) relay contact closures (max load 1A per output @ 48 VDC or 24 VAC) on base unit. May be expanded in groups of 8 up to a maximum of 40 by use of the ST317 expansion cards.

**REAL TIME CLOCK:** Accurate to  $\leq 2$  seconds per day. A correction factor can be set to further improve the accuracy if required.

**VARIABLES:** Definable internal flags, Classes, Thermisters, variables and counters to improve programme flexibility.

**2 x RS232:** RS232 serial communications to the host PC is achieved via various methods.

- a) Hayes Modem (dial up land line) Up to 19.2K baud
- b) ST330 Modem (dial up, voice & DTMF) 2400 baud
- c) ST303 RF Modem (Radio Modem) 2400 baud
- d) Local direct connect

**RS485 SERIAL PORT:** Two x RS485 port per controller is available for connecting multiple controllers together on the same site. In the future this port will be used for distributed processing functions.

**INTELLIGENT KEYPADS:** Up to 31 LCD, RS485, 4 Line display keypads can be connected to Sentor. These devices are used for keyless entry, Device readings, Device Control and Event Log reading at each site.

**REMOTE PROXIMITY AND ACCESS CONTROL:** Various types and brands of these types of systems are available on request. Cardax, Axeze, Weigand, Variprox, and others

**POWER:** 16 volts +/- 10% AC from the external Transformer.

**INPUTS:** 250mA with no load connected or outputs energised (350 mA with all outputs relays energised).

**AUX. POWER:** Approx. 800mA 12VDC power is available to power remote sensors. This reduces to approx. 500mA when a ST 317 is fitted.

**BATTERY BACKUP:** Most sites have external battery backup. If a further backup system is required an optional 7.2aH 12 volt sealed lead acid battery for Standby in case of AC power failure. The Sentor system has an inbuilt charger for this battery.

**TEMPERATURE:** 0 to 50 degrees C, 5-95% relative humidity operating.

**WARRANTY:** The Sentor system Hardware is guaranteed to operate reliably according to the product specifications for a period of 12 months. Warranty service is on a return to reseller basis. The product warranty is limited to the original purchase cost of the unit or product whichever is the lesser.

Your Local Sentor Dealer Is:



Australia Asia Pacific Europe North-South America South Africa



## What Can Sentor do for you ?

### The Sentor Solution

Sentor provides a wide range of **Fully Automated**, Live, Graphical, Intelligent, Remote Monitoring Control and Management processing for all types of Remote Wireless Communications Sites & Towers (Cellular, Two-way, Data & Emergency Service Networks). There is almost no requirement for supervisory intervention.

### Benefits – Save Thousands per year in Reduced Overheads & Increased Revenues

Remotely Monitor and Control all site assets from Tower Lighting, Environmental Conditions, Transmitter, Receiver Performance, Antenna Radiation & VSWR, Battery Systems and Security. Sentor allows **Total Remote Interaction** with the sites being monitored. Operators, Security and Technicians in the field know of alarms or failures in accurate detail and can fix problems over the phone. The need for costly site visits is drastically reduced saving thousands of dollars per year in operational overheads. Sentor increases revenue and decreases lost income.

## Technical Specifications

### Sentor ST3000 Controller System

- Up to 80 Programmable Inputs per housing
- Up to 40 Outputs (relay dry contact)
- Backup 7.2 ah Battery available
- Onboard charger
- On-board lithium battery backed memory
- Tamper switches (optional)
- RS 485 LCD Keypad output (up to 32 addresses)
- Security Strobe and Siren outputs
- 2 x RS232 Communications port
- 2 x RS485 Port
- X10 interface
- C-Bus Lighting control interface
- Full On board Event Log, Time & Date Stamp
- Modem, Voice, Dialer (Optional ST330 card)
- DTMF Recognition (Optional ST330 card)
- Keyless Access Interfacing
- Full Tower Lighting Control
- Modem interfaces for Radio, Cellular, Satellite

## Housing Options

### Sentor ST3000W (Wall Mounted)

Sentor Controller housed in Wall mounted lockable cabinet. The Cabinet has a hinged lid and convenient cable knockouts in both rear and side for quick and easy connection.



Fitted with mounting posts for Expansion Cards (ST317) and Telephone Support Card (ST330) boards, this cabinet is the same as the 19" rack mounted unit only without the front panel option.

#### Standard features include:

- Wall Mount Cabinet
- ST3000 Controller Card
- 16 inputs
- 8 outputs
- 2 x Communications Ports
- ST390 Power Supply

### ST3000R (Rack Mounted)



The Sentor controller is housed in a 19" 2RU metal powder coated enclosure suitable for installation into a Communications equipment rack.

The enclosure comes with a hinged lockable lid, 19" front plate, rack handles. An optional internal tamper switch is available. Convenient cable knockouts are located in both rear and side panels for quick installation.

#### Standard features include:

- Rack Mount Cabinet
- ST3000 Controller Card
- 16 inputs
- 8 outputs
- 2 x Communications Ports
- ST390 Power Supply

Please visit [www.sentorsystems.com](http://www.sentorsystems.com) for more information

### Inputs are Programmable and are optically Isolated

- Analog 0 - 30V
- Analog 0 - 10V
- Analog 0 - 5V
- Analog 0 - 1V
- Temperature (C and F)
- Digital
- Protected Loop
- Analog 4 - 20mA



## FEATURES

- TOWER LIGHTING & ALARMS
- REMOTE COMPUTER CONTROL
- REMOTE SITE SECURITY
- REMOTE KEYLESS ACCESS
- TRANSMIT FWD / REV POWER
- ANTENNA VSWR MONITORING
- SMS / PAGER NOTIFICATIONS
- HVAC / AIR CONDITIONING
- FULL BATTERY MANAGEMENT
- WIRELESS RF MODEM ACCESS
- CELLULAR MODEM ACCESS
- SATELLITE COMMUNICATIONS



## BENEFITS

- HUGE SAVINGS ON OVERHEADS
- INCREASED PROFITS
- INCREASED SITE EFFICIENCY
- INCREASED REVENUE
- INCREASED SITE RELIABILITY
- INCREASED PERFORMANCE
- REDUCED DOWNTIME
- REDUCED OVERHEADS
- REDUCED SITE VISITS
- CUSTOMER SATISFACTION
- TRENDING AND LOGGING
- AUTOMATED FAULT ANALYSIS

*Sentor is the most advanced Site Automation system in the world, to Remotely Monitor, Control and Manage your entire network, or even a single stand-alone site.*

- **Totally flexible easily programmed and remotely intuitive, Sentor has TOTAL onsite intelligence that controls everything at a Remote location by itself. Sentor is suitable for just about every site application you want to throw at it.**
- **Sentor's Windows based software views devices in Real-time and graphically as they happen. Sentor has Total Control and Interaction of Remote Site Assets. Digital devices can be changed remotely from the computer or cell phone. Alarms and Data are transmitted via Cellular, Wireless, Satellite, Phone, Microwave or Fibre Optic**
- **You can now tie ALL of your Alarms and On-Site Systems together with Sentor's superior Software and Hardware Control Equipment.**

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