

# Sentor Technical Specifications - ST7000 Controller

## HARDWARE

**MOUNTING:** Lockable 19" Rack /Wall mounted 2 RU or IP 66 Watertight Housing.

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

**REAR PANEL:** 7 knockout circular blocks for wiring and USB and 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

### Motherboard:

**Processor:** Atom 1.6 ghz

**Memory - Up to 1 GB**

**Software Platforms:** Linux, Win 7, Vista, WinCE, etc

**Protocols:** Java, DNP3, SNMP, Modbus, Weigand

**Authorized : Motorola Product**

**INPUTS:** 8 DIGITAL clean contact optically isolated differential Inputs and 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 12 bit D-A with sample rate of  $\leq 20$  times per second. The accuracy for analogue inputs is better than 0.5%

By adding ST717 expansion I/O cards via the RS485 Bus each card can be installed into either the main housing or can be run in a remote housing on cables at Standards EIA/TIA/ANSI 568 Cat5 twisted pair. The data rates obtained for cable lengths from 300 feet to 900 feet range from 1Mbps to 35Mbps.

The total number of inputs can be 512 using 32 cards on the RS485 Bus per Controller. Controllers can be linked to allow for endless I/O and Control.

**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 256 by use of the ST717 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, Thermistors, variables and counters to improve programme flexibility.

### PORTS & Communication Interfaces:

**4 x USB** (optional 16)

Communications to the host GUI is achieved via various methods.

a) Hayes Modem (dial up land line) Up to 19.2K baud

b) Wi-Fi DSL Modem

c) ST303 RF Modem (Radio Modem) 2400 baud

d) Local direct connect

e) Zigbee Wireless

f) 3 /4 G Cellular Modem on board Motherboard

g) Satellite Modem (Iridium or similar) Database Web Browser

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

**INTELLIGENT COLOUR TOUCH SCREEN :** Colour touch Display in Various sizes to suit customer applications and programmed to suit. These devices can be programmed to display Keypad simulation for keyless entry, Device readings, Device Control and Event Log reading at each site.

**REMOTE PROXIMITY AND ACCESS CONTROL:** Weigand Interface suitable to almost all brands of Access Control Card readers such as Cardax, Variprox, and many 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 717 is fitted.

**BATTERY BACKUP:** 7.2aH 12 volt sealed lead acid optional 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:

The advertisement features a blue background with a stylized network of white lines and nodes. In the top right corner, there is a photograph of a telecommunications tower against a blue sky. The Sentor logo, consisting of the word "SENTOR" in large red letters with a red swoosh underneath, is positioned in the top left. Below the logo, the text "Remote Wireless Monitoring Systems" is written in a smaller, white, italicized font. In the center, the website "WWW.SENTOR.COM" is displayed in yellow, followed by the tagline "Intelligent and Environmental Remote SCADA Control Systems" in white. Overlaid on the network graphic are several blue, 3D-style text labels: "Remote Control", "Wireless Awareness", "Network Management", "Remote Monitoring", "Tower Lighting", "Site automation", "Access Control", "Transmit Power", and "Remote Security".

**SENTOR**  
Remote Wireless Monitoring Systems

**WWW.SENTOR.COM**  
Intelligent and Environmental Remote SCADA Control Systems

Remote Control  
Wireless Awareness  
Network Management  
Remote Monitoring  
Tower Lighting  
Site automation  
Access Control  
Transmit Power  
Remote Security

Australia - Asia/Pacific - Americas – Africa - Middle East - Europe  
**WWW.SENTOR.COM**





## 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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## 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.



## 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 (expandable up to 80)
- 8 outputs
- 2 x Communications Ports
- ST390 Power Supply

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