

## SENTINEL 3000 RTU

Wireless Remote Monitoring and Control  
Fully Integrated and ready to deploy.  
Cellular based Industrial internet alarming  
and notification system.

The **Sentinel 3000** is a unique blend of Serial and IP communications options, digital and analog inputs, pre-integrated battery back-up and weatherproof enclosure that form a simple, cost effective, "report-by-exception" solution for remote monitoring of fixed and mobile assets, machines and processes of all kinds.

### **Packed with value**

Designed by experienced networking and telecommunication engineers to simplify remote communications and data collection, the **Sentinel 3000** comes well-equipped with a wide variety of applications managing everything from dial-up modem and network connectivity, digital and analog event alerts & alarms, serial to IP data conversion, data and event logging, remote file transfer, and much, much more. Just connect your input devices or serial device, select an application, and you're ready to deploy. It's really just that simple.

**Fully Integrated and ready for deployment** is not just some jargon.

Unlike other products the **Sentinel 3000** is complete and can be installed in minutes due to our unique design. There are no external antennas to install or modems to provision and configure. This is all handled by Cimtec prior to delivery. All customization of alarm messaging etc. is done remotely using the internet and our remote access utilities. What this means to our customers is ease of installation without an endless series of options to purchase.



### **Monitor from anywhere – anytime you want**

The Sentinel 3000 has the embedded network connectivity intelligence you've been looking for. Connectivity choices include Ethernet, dialup, remote access server, or ALL of these together. And when it comes to wireless, your choices are endless. The Sentinel 1000 can interface with any 802.11 Ethernet adapter (wireless bridge), as well as any private radio, satellite, or 3G cellular data modem, including both Ethernet and serial devices for GSM, GPRS, CDMA, 1X, EvDO, and iDen. This 'any network, any carrier, any modem' approach is what enables the Sentinel 3000 to be seamlessly integrated into any dialup, LAN, WAN, or wireless architec-

### **Here are a few of the features that the Sentinel 3000 has to offer:**

(12) Digital Inputs, utilizing time delays  
(4) Analog Input, scaleable 0—5V to 0—30V  
(2) Relay Output  
Ethernet, RS232, RS485 ports  
Supports CDMA, GPRS, & more  
Support for private radio  
Supports HTTP, TCP, UDP, PPP  
RS232 & RS485 device servers  
SMTP, FTP, and SMS clients  
Built-in web server, view data from anywhere

### **Broad Applications**

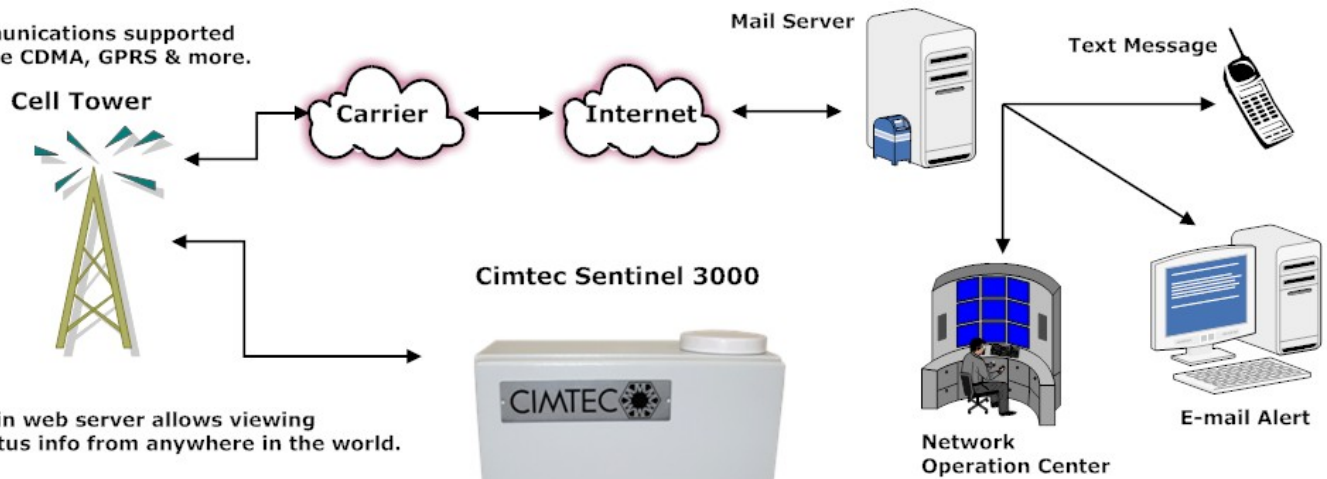
With it's ability to provide dependable easy to use alarming and notification, the Sentinel 3000 is a perfect fit for a variety of fixed and mobile data applications, including:

- Environmental Monitoring
- Homeland Security / Public Safety
- Storm Water Management
- Mobile Asset Management
- Energy Management Systems
- Solar System Monitoring/Alarms
- Equipment Use Monitoring
- Security / Access Control
- Intelligent Transportation
- Remote Data Collection
- Agriculture
- Water/Wastewater Monitoring
- Utility Service Monitoring
- Marine Security
- Retail Applications
- Security Applications
- Telecom Management
- AVL/Vehicle Tracking
- Construction
- Hospitality/Restaurant
- Ground Water Remediation Monitoring
- Remote Site Access
- Stand-by Power Monitoring
- Off Shore Applications
- Oil and Gas Monitoring
- Remote Process Monitoring
- Event Counting and Reporting
- Farming Applications
- Facility Management
- Amusement Park Applications

### **Below are some of Sentinel 3000's many pre-compiled applications:**

Capture digital inputs & pulses  
Receive and store serial data  
Log, count or totalize input events  
Monitor analog sensor range  
Alarm on inputs status change or set points  
Alarm on serial data streams  
Send alarms via text messaging/e-mail/FTP  
Send log/counts via SMTP/FTP  
Manual or triggered relay control  
120 VAC power monitoring standard

Communications supported include CDMA, GPRS & more.



Built-in web server allows viewing of status info from anywhere in the world.

Alerts can be resent at any interval required until event status change

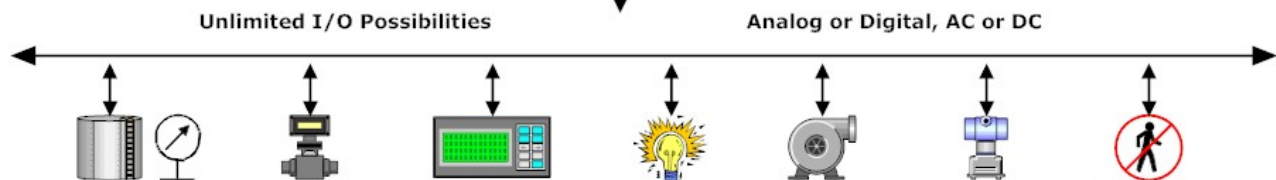
Supports TCP,UDP,PPP,HTTP SMTP,FTP,and SMS Clients Ethernet, RS232, RS485 ports

Fully integrated and ready to deploy Internet based set-up and customization of event messages

Alert Recipients can be anywhere Desktops,Phones,Pager,Laptops etc.

"Report by Exception"

SMTP Alerts are triggered by contact closures, analog values, or serial data. Time scheduled reports also!



Event reporting is initiated in several ways:

- Status change of configured inputs report automatically
- Time scheduled reporting according to set-up
- Status change is automatically updated on built-in web server

Specifications:

|   |  |  |   |
|---|--|--|---|
| Configuration Terminal / Telnet Interface                                     | 3G Cellular Support<br>Circuit-switched, SMS,        | RS232 Port Signals<br>TX, RX, GND, RTS, CTS, DSR, DTR, DCD             | Flow Control<br>Hardware RTS/CTS<br>Software XON/XOFF   |
| AT Commands   | GSM, GPRS, EDGE, CDMA, 1x, EvDO, iDen.               |  |   |
| MS Windows® Utility   |  |  |   |
| Real-Time Clock<br>Yes; Synched via NTP                                       | Protocols<br>Ethernet, IP, UDP, TCP, PPP, DNS, DDNS, | Serial Port Specs<br>Baud: 300 – 115200 bps<br>Parity: None, Odd, Even | Discrete Inputs<br>(12) Digital Inputs, dry contacts, AC and DC<br>(4) Analog Inputs 0-5,4–20ma 12Bit |
| Network Interfaces<br>(1) RJ45 10BaseT Ethernet                               | ICMP, FTP, SMTP, HTTP,                               | Stop Bits: 1, 2  | (2) Relay Output, 1A@120VAC   |
| PPP over RS232 DTE  | Telnet, Syslog, IMPP                                 | Data Bits: 7, 8  |   |
| Physical Dimensions<br>Nema 4 & Nema 4X<br>(H x W x D)<br>15.5" x 15" x 8.25" | Environmental<br>Operating Temp<br>40° to +70° C     | Humidity<br>5–95% Non-condensing                                       | Electrical Supply<br>120VAC, 200W   |
| Weight<br>35.0lbs   |  |  |   |

**Sentinel Standard Report Service**

Cimtec offers cellular set-up and provisioning for all major carriers. This service includes all monthly cellular charges for one year and monthly checking of your Sentinel 3000 by remotely initiating test e-mails to verify reporting functionality. See Sentinel Order Code worksheet for pricing.

**Sentinel Enhanced Report Service**

Includes all "Standard" services with continuous modem monitoring ensuring you are always protected. See Sentinel Order Code worksheet for pricing.

**Options:**

- Temperature Sensor
- 4–20ma Signal Conditioner
- Weatherproof Door Lock
- 802.11 Interface
- 802.11 Remote Hot Spot Configuration
- Cable/DSL networking configuration
- Dial-up Modem Configuration
- Proximity Card Reader (Wiegand-26)
- RFID Tag Reader
- Nema 4X Enclosure
- Solar Power

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**Disclaimer: It is the responsibility of the purchaser to verify the suitability of cellular coverage in the area of use by checking with the carrier or contacting Cimtec for assistance.**

