



# siteRSM

## Radio System Monitoring, Alarm and Control



The siteRSM remote monitoring system provides field personnel with the insight needed to determine if there is a problem with the radio site. If the operational status of your wireless network is important to you, then siteRSM with siteVIEW Enterprise is what you need to make "informed" decisions.

The siteRSM is an affordable industrial temperature-rated, robust, low power device that allows effective site monitoring and control in many industrial and commercial applications. The siteRSM system is a flexible solution for monitoring device functionality and the communication backbone for its connectivity.

### Backhaul Flexibility

A unique attribute of the siteRSM is its capability of handling most methods of transporting data between the central monitoring location and the remote site. These methods include two-way radio, Ethernet, serial, landline dial-up, and cellular. Having this flexibility provides many options depending on how the network is designed. Alarm notification from siteVIEW Enterprise can be a text message or an email that is sent to a phone/smartphone.

The siteRSM system platform can be easily configured to meet the requirements of each application enabling it to serve in a variety of industries (largely due to the fact that they all rely on a radio infrastructure of some kind):

- Utilities
- Oil & Gas
- Energy
- Mining
- Forest Services
- Public Safety
- Fresh Water Management
- Waste Water Management
- Transportation
- Agriculture

Benefits to be realized:

- Security & Control
- Low Power Consumption
- Economical Solutions
- Reduced Downtime
- Operational Efficiency
- 'At source' Decision Making

The siteRSM can be deployed in point-to-point, and point-to-multi-point applications. The system can be configured to monitor most items including doors, solar panels, batteries, charging circuits, generators, fuel tanks and repeaters. The system can also be used in control applications where an input mapping feature allows an event or a change in state to trigger an output.

### Inputs and Outputs

The siteRSM has the following standard inputs and outputs:

- 8 digital inputs capable of accepting a wide input voltage range (up to 60VDC) from contact closures, passive switches or solid state switching devices
- 8 analog inputs that can be programmed with upper and lower set points
- 8 open drain output channels capable of switching up to 50VDC at 150mA each
- 8 temperature inputs when equipped with optional sensors

There are no limitations to the number of sites that make up a siteRSM network. The siteRSM in conjunction with siteVIEW Enterprise can monitor many of the critical parameters that make up your system, such as:

- Voltage levels
- Power status
- Intrusion
- Connectivity
- Temperature (optional)
- RSSI
- Forward and reflected power

The siteRSM system by TASC is designed and packaged to meet the current and future requirements of the wireless industry. The system is designed to accommodate most backhaul technologies and consume the least amount of power, satisfying the requirements of most remote locations. The siteRSM combined with siteVIEW Enterprise will monitor your remote site, arming your field personnel with valuable information needed to take appropriate action.

<b>Motherboard</b>													
Power	+11 to +20 VDC												
Current Consumption	Maximum 80 mA @ +13.5 VDC; <15 mA current draw in low power mode, (1 second wake-up interval).												
Weight	Less than 500 g												
Operating Temperature	-40 to +65°C												
Digital Inputs	8 contact closures, switches, open collector or voltage inputs (0 to 60 VDC input) with individual hold timers												
Digital Outputs	8 'open drain' FET outputs, switching up to 50 VDC @ 150 mA each. Programmable latching and unlatching output.												
Analog Inputs	8 x 10-bit A/D, 0 to 5 VDC, 0 to 25 VDC, 0 to 100 VDC (external adapter) with individual hold timers and high/low trigger set points per input.												
Temperature Monitoring	Up to 8 temperature sensors (option, see specification below) on a parallel bus												
Serial Ports	Two RS-232 asynchronous ports												
<b>Optional Ethernet Interface</b>													
Data Rate	300 bps to 921,600 bps												
Interface	Ethernet 10Base-T or 100Base-TX (Auto-Sensing)												
Protocols	TCP/IP												
Current consumption	Maximum 220 mA @ 13.6 VDC												
Operating Temperature	-40 to 85 Celcius												
Security	Password protection, 256 bit AES Rijndael encryption												
<b>siteRSM Configuration Utility (SCCU)</b>	The SCCU is included with the siteRSM. The utility allows the user to configure the modules' operating parameters from a personal computer running Windows™ 98, 2000 or XP.												
<b>siteVIEW Enterprise Site Monitoring and Control Software</b>	TASC siteVIEW Enterprise is a fully configurable Windows™ (2000 or XP) based site monitoring and control software package for use with siteRSM hardware. This software package allows the user to graphically view detailed information about each site. siteVIEW Enterprise features simple drag-and-drop configuration, extensive event logging, audible alarm notification, and automatic polling.												
<b>Optional Temperature Sensors</b>	The siteRSM can support up to a maximum of 8 temperature sensors per module. Requirements beyond this capacity can be supported by special order. <table border="0" style="width: 100%;"> <tr> <td>Span:</td> <td>-55 to +125°C</td> <td>Connector:</td> <td>RJ-45 Modular jack</td> </tr> <tr> <td>Accuracy:</td> <td>-25 to +100°C +/- 2 C°</td> <td>Bus derived power:</td> <td>2 mA per sensor</td> </tr> <tr> <td></td> <td>-55 to +125°C +/- 3 C°</td> <td></td> <td></td> </tr> </table>	Span:	-55 to +125°C	Connector:	RJ-45 Modular jack	Accuracy:	-25 to +100°C +/- 2 C°	Bus derived power:	2 mA per sensor		-55 to +125°C +/- 3 C°		
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<b>Input / Output Expansion</b>	Maximum 40 digital inputs, 24 analog inputs, 8 outputs converted to 8 relay contacts												
<b>Sensor Options</b>	Forward and reflected power sensor (BPS), differential sensor for measuring current.												
<b>Enclosure Options</b>	The siteRSM is available in a variety of packaging combinations which include a 19" rackmount (1RU and 2RU), NEMA 4 and clamshell.												

TASC Systems Inc. is continuously working to improve system performance and expand product capabilities. Specifications are subject to change without notice. 2009

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