37 SOUTH | SITE SENTINEL® P2

High performance, ultra-compact data logger + RTU

P2

- MODBUS COMMS FOR SMART DEVICES
- TANK LEVEL MONITORING
- CATHODIC PROTECTION MONITORING
- PRESSURE SEWER PUMP STATIONS
- INTERNAL 3G/4G MODEM
- REMOTE DEVICE MANAGEMENT

The P2 is the ultra-compact, industrial-focused variant of the Site Sentinel® data logger and RTU family, providing highly-reliable, direct-to-host data monitoring in a single package.

The Site Sentinel® P2's flexible device configuration enables the measurement of a variety of analog and digital signals. This data is stored internally on non-volatile Flash memory with upstream communications provided using an internal 3G or 4G cellular modem. Host compatibility is ensured with integrated support for DNP 3.0 and FTP data protocols.

The device is housed in a very low-profile, robust enclosure supporting a variety of installation options, including DIN rail compatibility and flat-panel mounting.

Additional communications port provides Modbus Master communications capability. User configurable Modbus table permits download of pre-defined or ad-hoc Modbus data profies to support 'smart' downstream devices such as flowmeters, power meters and water quality probes. Remote configuration and device management is supported via leading industry SCADA applications, remote firmware download capability is provided via FTP file transfer.

The P2 suits a wide range of industrial applications, such as data logging of remote sites, tank level and flow recording, pipeline cathodic protection monitoring and integration with pressure sewer pump stations.

TECHNICAL SPECIFICATIONS

General

Supply Voltage	9–30V DC (non-isolated supply input)
Current Draw	0.8 mA sleep, 10 mA awake, 200 mA 3G communications, 2 A (peak) 3G network detect, (measured at 12V DC)
Real Time Clock	Internal – Year, month, date, hour, minute, second, Automatic DNP3 time synchronisation from DNP3 master, Automatic cellular network time sync when using FTP data export mode
Temperature	–20°C to +65°C Celsius
Humidity	0 to 90% relative humidity, non-condensing
Programming	Windows based Configurator M+ configuration software, Remote device management via DNP3, Remote firmware download via FTP, local programming port
Mounting	132.6mm (w) (inc mounting feet) x 26.0mm (h) x 82.7mm (d), DIN Rail mounting clips provided

IO Interfaces

Digital Input	2x dry-contact binary inputs, Each input supports pulse counting up to 10Khz (non-isolated), Forward/Reverse/Nett Totalisers with 32 Bit rollover
Analogue Input	2x 0–20 mA, 0–2.048V DC, 0–5V DC or digital input (user selectable, per channel), 15 bit resolution (non-isolated), 4x user-configurable alarm limits per channel
System Input	Internal measurement of Cell Network RSSI, RTU temperature, RTU battery voltage and session status code
Serial Comms	1x Modbus Master 2-wire RS485 Serial Port (screw terminals)

Telemetry

3G Cellular (Standard)	Supports 3G B1 (2100), B5 (850), B8 (900), Class 3 output power (+24dBm)
4G Cellular (Option)	Supports 4G/LTE B1 (2100), B3 (1800), B5 (850), B8 (900), B28 (700), Class 3 output power (+23dBm)
Antenna	External SMA female connector
SIM Card	1.8 and 3V UICC (Standard size SIM card)
Data Protocols	DNP3.0 Slave unsolicited / polled mode, FTP data export
Host Support	True TCP support to DNP host (supports three Master IP addresses)
Security	CHAP or PAP authentication, SIM credentials, configurable username, password and APN, built in IP firewall, 512-Bit AES Encrypted firmware download

Approvals

Build	RoHs assembly
Standards	RCM (AUST/NZ), EMC compliance, other export standards on request
Production	Proudly Made in Australia

Factory Acessories

Accesories	A comprehensive range of factory manufactured or sourced accessories to ensure reliable and swift solution deployment (see website)