servelec technologies

Integrated SCADA, Telemetry and Business Optimisation

- SCADA Design & Systems Integration
- Remote Telemetry & Control Technologies
- Optimisation & Decision Modeling Tools

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SEPROL S2000nano

Battery / Ultra Low Power IP68 Ruggedised RTU & Logger

The **S2000nano** is a WITS and Native DNP3 based Intelligent low power RTU / logger. It has evolved from the proven and highly successful S250/255/500/2000 range and has been engineered to deliver accurate monitoring and control for demanding applications where reliability is the key consideration.

The unit benefits from a flexible input/output range, it is fully programmable and includes a embedded web-server, multiple wireless communication options and user application support via IsaGraf IEC1131-3 programming tool.

The S2000nano offers you powerful new processing technology perfectly suited to a wide range of applications at a highly competitive price.

WITS
Water industry telemetry standards
WITS-DNP3 Founder Member

dnp
Distributed Network

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Servelec Technologies **SEPROL S2000nano**

Key Features

- Fully Native DNP3 & WITS Compliant
- Integral Web-Server
- Fully Compliant with SCOPE-X Configuration Tools
- Cost Effective
- Report / Fault Log Facility
- 4DI, 2AI, 1DO
- Battery or external DC Powered 6V-30Vdc

Highly configurable outstation generated alarms

- Flexible limit configuration with optional hysteresis/persistence.
- Choice of actions for each point state (log, event, alarm).
- Fixed limit values or daily/weekly limit profiles.

I/O Features

- Configurable analogue scaling.
- Statistics generated from point data (min/max/min/integral).
- Standard rate-of-change/no-change detection, state counter and run time calculations.
- Point overrides.
- Dynamically configurable period/event logging.

Configuration

- Standard method of configuring commonly used features.
- Reduces possibility of configuration problems - most errors trapped at point of entry.
- Consistent configuration - outstations will not accept configuration if any part is rejected.

Security

- Authentication of critical commands from master station.

WITS
WATER INDUSTRY TELEMETRY STANDARDS

WITS Key Business Benefits

- Single protocol to support multiple vendors - reduced support/training costs.
- Secure authentication between outstations and master station, complies with CPNI guidelines.
- Common outstation configuration and application programme.
- Flexibility - master or outstation managed configuration options.

Which problems does WITS solve?

- Reduces configuration errors due to machine readable outstation capability files - only allows configuration of features and parameters that are actually supported by the outstation.
- Version control of outstation configuration and application programs.

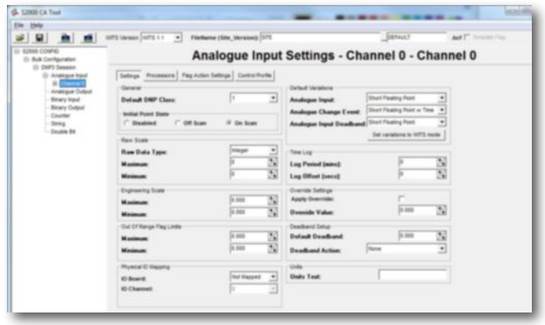
Easy Navigation

CHAMBER MOUNT

POLE MOUNT

WALL MOUNT

Easy Configuration



S2000nano Specification

General

Type of Processor:	Kinetis K66 (ARM Cortex M4) with encryption accelerator
Environment:	IP68 (4m depth for 4 days) Operating Temp. -40 °C to 70 °C
Processor Speed:	96MHz
Memory (Onboard):	4 Mb SRAM, 10 Mb FLASH, ½ Mb FRAM
Memory (SD card):	Up to 32Gb
RTC Backup period (No PSU):	> 1 day
DIMENSIONS:	Width 142mm Height 197mm Depth 115mm
Programming Languages:	IEC61131-3 Sequential Function Chart, Function Block, Ladder, Structured Text, Instruction List
Data Logging:	100,000 records (DNP Mode)

I/O Specification

2 Multiplexed Analogue Inputs

Type of Input:	0-5V/0-20mA
Resolution:	20 bits
Accuracy (-40 °C to 70 °C):	0.15% (Voltage)
Loop supply	24Vdc

4 Digital / Counter Inputs

Type of Input:	Volt Free Contacts
Contact Wetting Voltage:	5Vdc nominal
Input Pulse Frequency	0-20Hz

1 Digital Output

Type of Output:	Solid state relay (Photo MOSFET)
Maximum Switching Voltage:	16 Vac / 35Vdc
Maximum Switching Current:	200 mAdc (per channel)
On Resistance (Typical):	1 Ohms
On Resistance (Maximum):	10 Ohms

Communications

Data types supported	GSM / GPRS / 3G / CDMA
Data rate	115Kbs
LED Indication	Indicates registration & call active

For more information please contact:

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