Improve security and reliability of your remote operations
SCADAPack, a family of compact, versatile controllers and data loggers for telemetry and remote SCADA solution
Smart remote terminal unit (RTU), remote programmable automation controller (rPAC), and data logger for challenging applications

In order to operate efficiently, your SCADA system requires reliable data collection, monitoring and control. However, you face unique challenges when the infrastructure is dispersed over a wide area and only accessible through disparate communication media.

Key questions:
How current is the data and will it be lost if communication is interrupted?
How can the impact of unauthorised control or hacking attempts be minimised?
How will the RTU work at remote sites where power is very limited?

Cut engineering and operating costs
Operate in challenging environments
Help reduce pressure from security threats and regulatory requirements

Introducing SCADAPack
Enhanced solutions for Oil & Gas
Enhanced solutions for Water and Wastewater
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Cut engineering and operating costs
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Non-compliance can be dangerous and costly. Prevent consequences of high-profile cyber-attacks and environmental disasters. Focus on awareness.
SCADAPack™ Smart RTUs combine the monitoring and communication capabilities of a remote terminal unit (RTU) with the processing and data-logging power of a programmable logic controller (PLC). SCADAPack Smart RTUs are perfect wherever remote processes require automatic supervision and autonomous control.

The SCADAPack data logger connects battery-powered, autonomous monitoring and GSM networking to provide low-cost, low-maintenance monitoring of highly dispersed assets.

SCADAPack remote programmable automation controllers (PAC) combine the power of a PAC with the versatility of an RTU. SCADAPack rPACs are ideally suited to remote applications that need faster processing speed and higher performance.
Optimise your resources

Optimise your resources with third-party networking equipment through open protocols, while operating under low or restricted power conditions.

SCADAPack Smart RTU and rPAC

SCADAPack data logger

Optimise your resources
Control operation and maintenance
Help to enhance security and reliability of data from field to control room

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Optimise your resources

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**SCADAPack Smart RTU and rPAC**

Reduce design and implementation time with flexible connectivity and programming features:

- Wide range of connectivity options to easily retrofit into legacy systems or expand current systems
- Scalable product range with I/O expands capability
- Open protocols to interface with third-party SCADA infrastructure
- Flexible programming options
- Integrated wireless options (license-free TRIO data radio or 3G/LTE modem) with extended operational range without affecting control panel footprint (refer to individual SCADAPack data sheet for more information)

**SCADAPack data logger**

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SCADAPack data logger

Remotely monitor your equipment in areas with limited power and network access:

- Battery-powered with more than 5 years autonomy
- Analog, digital, and Modbus inputs
- Binary SMS messaging over GSM networks
Control operation and maintenance

Exploit alternative energy sources, increase system efficiency, and reduce the frequency of costly on-site visits

- SCADAPack Smart RTU and rPAC
- SCADAPack data logger

- Optimise your resources
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- Help to enhance security and reliability of data from field to control room
Control operation and maintenance

Exploit alternative energy sources, increase system efficiency, and reduce the frequency of costly on-site visits.

SCADAPack Smart RTU and rPAC

Help reduce total cost of deployment with:

• Gas flow metering (O&G) or pump control (Water and Wastewater) combined with data logging, PLC control and RTU communication in one device
• Integrated data logger providing enhanced control capabilities that help increase operational efficiency and reduce costs
• Remote configuration firmware upgrade and diagnostics features allowing system deployment and maintenance tasks to be executed from a centralised location over existing communication infrastructure
• Low-power models achieving significant cost savings due to the smaller solar panel/battery size required to power the unit

SCADAPack data logger

Optimise your resources

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Help to enhance security and reliability of data from field to control room
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SCADAPack Smart RTU and rPAC

Provides a low cost platform for remote monitoring using an IP68 enclosure that allows mounting in process applications without additional enclosure.

Efficient network usage is realised through local data logging followed by scheduled transmissions over GSM networks:

- Configurable monitoring rates on all input channels
- Report-by-exception on any digital channel
- Logged data is sent over GSM on a pre-defined schedule, typically once a day

Optimise your resources
Control operation and maintenance
Help to enhance security and reliability of data from field to control room

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Enhance data security and reliability, from field to control room

Help ensure that remote communication links are not compromised by malicious intent or interference from other communication networks:

- Encryption for DNP3 protocol (AGA12) and DNP3 Secure Authentication help mitigate effects of interference with data monitoring and control commands
- Time-stamped event logging provides audit trail of operational data changes and other key data reliability indicators

Optimise your resources
Control operation and maintenance
Help to enhance security and reliability of data from field to control room

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SCADAPack products are interoperable with a range of specific software and configuration tools that help enhance performance in oil and gas applications.
SCADAPack RTUs are also flow computers. The optional Realflo flow computer application co-exists with the SCADAPack’s PLC logic, making this electronic flow measurement (EFM) solution fully extendable for production optimisation, monitoring, and collection of API 21.1-compatible measurement history, events, and alarms. This approach eliminates the need for separate PLC and EFM hardware.

The SCADAPack 4203 GFC combines a multi-variable sensor and a SCADAPack RTU, all within a single Explosion proof transmitter housing to function as a highly integrated gas flow computer/RTU.

A second flow run may be implemented with the addition of a 4102 Modbus multi-variable transmitter. The SOLARPack 410 is a cost-effective, out-of-the-box, single-run flow computer for use in installations where solar is the only power source, and operator access is difficult.
Gas distribution and cathodic protection

The SCADAPack 50 data logger provides an efficient solution for logging and transmitting data collected on gas distribution or mid-stream cathodic protection systems. In gas distribution systems, the data logger counts pulses from linear flow meters for periodic transmission of flow data.

Analog inputs on the SCADAPack 50 can be connected to cathodic protection test points for portable and/or remote monitoring.

Easily deployed and operating on an internal battery, the SCADAPack 50 transmit the collected data to the host or an operator’s SMS device through a dedicated GSM modem connection.
Enhanced solutions for Water and Wastewater

SCADAPack products are the foundation for a range of solutions offering specific software and configuration tools that help enhance performance in Water and Wastewater applications.
SCADAPack Smart RTUs and rPACs offer additional capabilities of DNP3 and IEC 60870-5. They have an embedded historian allowing time-stamped event logging and data sampling for extended period of time.

- **IEC60870-5 and Distributed Network Protocol (DNP3)**
- **Encryption option (AGA12)**
- **DNP3 Secure Authentication**

**Optimise remote pumping networks**

- DNP3 – More Than Just an Electric Power Utilities Protocol (white paper)
- Using DNP3 to Solve Oil & Gas and Water Remote SCADA Communication Challenges (white paper)

**Control lift station**

Introducing SCADAPack | Enhanced solutions for Oil & Gas | Enhanced solutions for Water and Wastewater
IEC60870-5 and Distributed Network Protocol (DNP3) provide flexible communications between devices. By continuously storing data even when communication links go down, both protocols reduce the number of costly and time-consuming maintenance trips to the field.

DNP3 may be fitted with optional encryption/authentication options that help increase remote communication security.

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Encryption option (AGA12)

DNP3 Secure Authentication

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Control lift station

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The AGA12 Encryption option helps protect DNP3 data transmission, using unique encryption keys and provide data confidentiality and integrity for revenue-metering data and other operations.

Optimised for remote pumping networks

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DNP3 Secure Authentication

Optimise remote pumping networks

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DNP3 Secure Authentication helps to add further security to data transfer with automatic verification by the SCADAPack E RTU to incoming control commands, requiring additional DNP3 master identification information before processing the command.

IEC60870-5 and Distributed Network Protocol (DNP3)

Encryption option (AGA12)

DNP3 Secure Authentication

SCADAPack Smart RTUs and rPACs offer additional capabilities of DNP3 and IEC 60870-5. They have an embedded historian allowing time-stamped event logging and data sampling for extended period of time.

Optimised for remote pumping networks
Optimised for remote pumping networks

With advanced features, such as peer-to-peer communication, remote diagnostics and remote firmware upgrade, point object alarm handling, time profiles and point quality reporting, SCADAPack E Smart RTUs and rPACs are ideally suited for a wide range of demanding water and wastewater applications, such as pumping station active overflow mitigation, energy optimisation, and asset management.

When used with ClearSCADA infrastructure remote management software, centralised SCADAPack E configuration and management integration offers significant savings in total cost of ownership for geographically distributed water and wastewater assets.
FlowStation is a complete pump station controller ideal for use in storm and wastewater lift stations and pump-up applications. This economical, convenient control solution manages power usage and related costs while minimizing energy consumption during peak demand periods. FlowStation supports custom functionality, allowing for the creation of simple or feature-rich web pages viewable from a local touch screen, BlackBerry, or other remote web browser.

The SCADAPack 50 data logger provides an efficient manner in which remote water processes can be monitored. Typical applications include pressure monitoring in lift stations, level monitoring in reservoirs, and status monitoring in storm drainage systems. Optional external antennas allow for subterranean installations while flexible wiring options allow a choice of input combinations between analog and digital or Modbus.