

Hand in hand for reliability

Measuring at the end of the world thanks to SIMATIC RTU3030C and Siemens field devices

siemens.com/processinstrumentation

Combined reliability

The perfect teamwork of the remote terminal unit SIMATIC RTU3030C and Siemens process intrumentation opens up new possibilities

Operators of telecontrol systems, e.g. in the water supply sector, often have to monitor unmanned plants or measuring stations (e.g. wells) that are widely spread geographically. Service calls here are associated with high costs. Moreover, some measuring stations are not connected to the power grid for financial or other reasons (e.g. located in a nature reserve). A remote terminal unit (RTU) used at such measuring stations for the collection and transmission of measured values (e.g. level, flow rate, filling height, temperature, pressure) requires an alternative power source.

That's where the SIMATIC RTU3030C comes into play.

The remote terminal unit is energy-self-sufficient and can be used even in locations where no power supply exists. With an additional external enclosure (IP68) it can even resist floods.

Typical applications are in the water and wastewater industry, agriculture or inventory control. The RTU can be used, for example, for detection of leaks, monitoring of pumping stations and water tanks, remote inventory control, monitoring of liquid levels in tanks and silos or monitoring of agricultural irrigation systems. Even level monitoring of standing and flowing water bodies, and also flood protection are possible.



Battery-operated water meter SITRANS MAG8000 together with the SIMATIC RTU3030C inside the external enclosure IP68 with antenna.



SIMATIC RTU3030C with antenna and pressure transmitter SITRANS LH100 for hydrostatic level measurement.

The SIMATIC RTU3030C sends data to a control center via a telecontrol protocol (TeleControl Basic, DNP3 or IEC60870-5-104). In case of a defined unusual event (e.g. if specified threshold values are exceeded) an alarm is sent with high priority to the control center or selected personnel by e-mail or SMS.



Efficient automation solutions and simple integration of field devices in the process control system offer the highest accuracy in process instrumentation. The SIMATIC RTU3030C records measurement values from connected sensors (e.g. flow, level, temperature or pressure) and uses mobile communication to transmit this data to the control center or master station – secured via an OpenVPN tunnel or an encrypted e-mail. Even from the world's most remote areas – the SIMATIC RTU3030C is completely self-sufficient.

The advantages at a glance:

1 Energy-self-sufficient – even in case of no local power grid

High degree of flexibility with regard to deployment location thanks to its optimized energy consumption and operation with battery or accumulator with solar panel. The sensor can be powered by the RTU.

2 Easy engineering

Simple commissioning and parameterization without additional software thanks to webbased management and remote access to RTU.

3 Different telecontrol protocols

Diverse applications due to connection to different control centers thanks to different telecontrol protocols.

4 Diverse fields of application

A comprehensive portfolio of process instrumentation offers a wide range of applications.

5 Data logging

Recording and storage of time-stamped measured values on an SD card.



The possibilities are almost endless thanks to the comprehensive portfolio of process instrumentation. For example level monitoring in the water and wastewater industry (1) or flow measurement with the SITRANS F M MAG 5100 W (2).



Siemens AG Process Industries and Drives Östliche Rheinbrückenstr. 50 76187 Karlsruhe Germany

Article No.: PDPA-B10137-00-7600 Dispo 27900 WS 06161.5 Printed in Germany © Siemens AG 2016

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

All product designations may be registered trademarks of Siemens AG. All other designations in this document may represent trademarks whose use by third parties for their own purposes may violate the proprietary rights of the owner.

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates.

For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Thirdparty products that may be in use should also be considered.

For more information about industrial security, visit http://siemens. com/industrialsecurity. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.industry.siemens.com.

