

SIEMENS
Ingenuity for life



**One Router.
A Cloud of Possibilities.**
RUGGEDCOM RX1400 with CloudConnect

siemens.com/rx1400

Digitalization is transforming industries such as electric power generation and distribution, transportation, and oil & gas. As a result, there is significant progress being made in networking between operational production networks and enterprise IT. Production data can be collected and analyzed in the cloud, in management systems or directly on the edge of your network to monitor assets and optimize operations.

Connecting and aggregating data from existing production networks presents a major challenge, since these often consist of equipment from multiple vendors which use different data languages and/or protocols. In addition, the collected data also needs to be transferred to the systems capable of analyzing it. Addressing challenges like

collecting and pre-processing of the production data in existing applications before it can be sent over a network can become time consuming, difficult, and costly.

An industrial IoT gateway, such as the RUGGEDCOM RX1400 with CloudConnect, is an all-in-one solution for plug-and-play connectivity to all common cloud solutions e.g. Siemens MindSphere, Amazon Web Services, Microsoft Azure and other cloud solutions. This solution provides the combined capabilities of data acquisition, conversion and communication with MindSphere or other cloud solutions.

It features web based stand alone configuration, optimized data traffic based on publish/subscribe mechanisms, and trigger management for event driven and cyclic communication.

Intelligent Networks. Anywhere.
The RUGGEDCOM RX1400 at a glance:

- Rugged router with integrated ethernet, fiber optic, cellular, WLAN and serial interfaces
- Virtualization allows a Linux operating system and applications to run in parallel with the RUGGEDCOM ROX II operating system
- Built-to-order to ensure perfect product fit to your application
- Compact form factor with multiple mounting options
- Proven functionality in the harshest of environments
- All-in-one solution for plug-and-play connectivity to MindSphere

5 Monitoring, evaluation and optimization of production in the cloud

3 Data pre-processing enabling analytics and filtering at the edge of the network as close to the source as possible

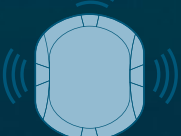
1 Collection and compression of relevant production data from different sources



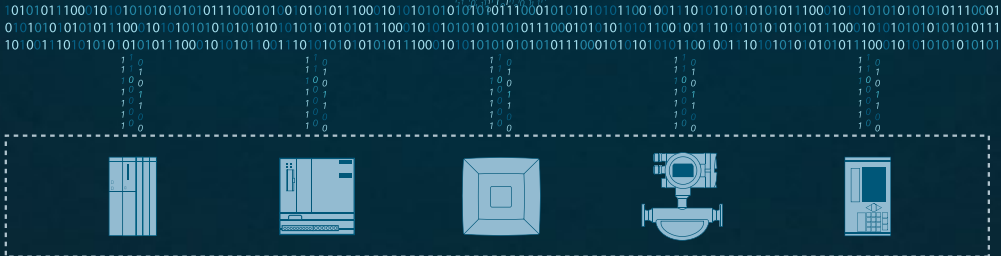
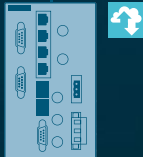
Cloud services
- MindSphere
- Amazon Web Services
- Microsoft Azure
- Other cloud services



4 Secure transfer to connected IT systems



2 Conversion to required protocol



Sample Applications



Condition Based Maintenance

Collection and analysis of data such as asset specific operating parameters, temperature and operating hours to enable a condition based maintenance approach for remote assets.

Fleet Management

Send the pre-processed data into MindSphere – the cloud-based, open IoT operating system from Siemens and always get an up-to-date overview of your data through one of the MindApps.

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.

Siemens AG
Process Industries and Drives
Process Automation
Postfach 48 48
90026 Nürnberg
Germany

Siemens Canada Limited
300 Applewood Crescent
Concord, Ontario, L4K 5C7
Canada

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