

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit: [siemens.com/industrialsecurity](https://www.siemens.com/industrialsecurity)

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends to apply product updates as soon as available and to always use the latest product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under: [siemens.com/industrialsecurity](https://www.siemens.com/industrialsecurity)

The information provided in this brochure contains descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice. All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.

For more information, please visit:
[siemens.com/ruggedcom](https://www.siemens.com/ruggedcom)

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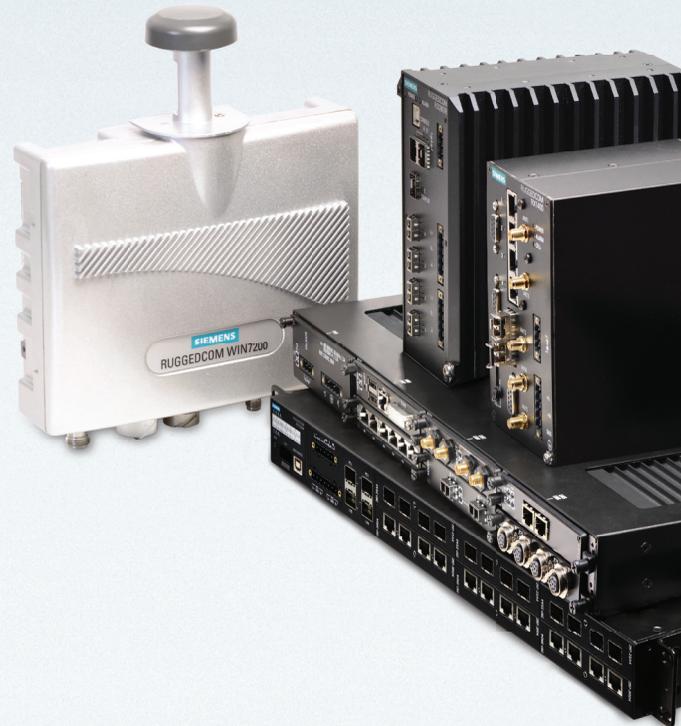
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SIEMENS



Overview

Edition
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Rugged Communication

RUGGEDCOM Products at a Glance

Rugged network components

[siemens.com/ruggedcom](https://www.siemens.com/ruggedcom)



RUGGEDCOM products provide a level of robustness and reliability that have set the standard for communication networks deployed in harsh environments.

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RUGGEDCOM product family

RUGGEDCOM products are part of Siemens industrial communication networks portfolio. They offer extreme temperature range, Zero-Packet-Loss technology for immunity to high levels of electromagnetic interference, and enhanced Rapid Spanning Tree Protocol (eRSTP™) for ultra high-speed network fault recovery.

RUGGEDCOM products can be found in mission critical networks used in electric power, transportation and oil&gas industries.

Rugged Rated

RUGGEDCOM products have been specifically designed and tested to withstand harsh environments.

Features

- Large variety of fiber port options available
- Long haul fiber support
- -40° C to +85° C operating temperature (no fans)
- Conformal coating for extra environmental protection
- High immunity to EMI and heavy electrical surges
- Many different fiber port options available

Reliable operation in harsh electrical environments

- IEC 61850-3 and IEEE 1613 (electric power)
- IEC 61000-6-2 and IEC 61800-3 (industrial environments)
- NEMA TS-2 (traffic control)
- EN 50121-4 (railway)
- EN 50155 (on-board rail vehicles)

Error-free operation in high EMI environments

- Zero-Packet-Loss technology for fiber-based networking devices
- IEEE 1613 class 2 error-free performance under EMI stress

Operation over a wide temperature range

- -40° C to +85° C operating temperature
- Passive cooling – no fans

High availability

- Integrated single or redundant power supplies
- Dual power supplies can be powered independently, from different input voltages
- Universal high-voltage range: 88–300 VDC or 85–264 VAC
- Low Voltage power supplies

Industrial installations

- Metal enclosure
- Heavy duty mounting
- Industrial terminal blocks for power and I/O connections



HALT – Eliminate weaknesses in design

Highly Accelerated Life Testing (HALT) subjects design prototypes to vibration and ambient temperatures far beyond their normal operation range. Siemens uses HALT results to verify and improve its designs.

HASS – Remove manufacturing errors

Siemens performs Highly Accelerated Stress Screening (HASS) on all RUGGEDCOM products, in order to ensure that customers get their orders free of manufacturing errors and random defects.

Ethernet Layer 3 switches and routers

Ethernet Layer 3 switches and routers are designed for use in high performance industrial networks. They are modular in design and support various IT standards, including VLAN, IGMP and RSTP.



RUGGEDCOM RX1400

Multi-protocol intelligent node

- Integrated power supply
- 4 x 10/100BASE-TX, 2 x 1000BASE-X SFP
- Optional cellular modem (LTE/4G and WLAN Access Point/Client)
- Optional virtual machine environment



RUGGEDCOM RX1500

Layer 2 and layer 3 switch and router

- Modular redundant power supplies
- Supports up to 4 line modules
- Supports RUGGEDCOM APE



RUGGEDCOM RX1501

Layer 2 and layer 3 switch and router

- Modular single power supply
- Supports up to 6 line modules
- Supports RUGGEDCOM APE



RUGGEDCOM RX1510

Compact layer 2 and layer 3 switch and router

- Modular redundant power supplies
- Supports up to 4 line modules
- Supports RUGGEDCOM APE



RUGGEDCOM RX1511

Compact layer 2 and layer 3 switch and router

- Modular single power supply
- Supports up to 2 line modules
- Supports RUGGEDCOM APE



RUGGEDCOM RX1512

Compact layer 2 and layer 3 switch and router

- Internal wide-range DC power supply
- Supports up to 2 line modules
- Supports RUGGEDCOM APE



RUGGEDCOM RX5000

High port density Ethernet routing and switching platform

- 2 x 10GBASE-X SFP+ uplinks
- Support for up to 98 ports
- Modular redundant power supplies
- Supports up to 6 line modules

Common features

Cyber security appliance functions

- Integrated firewall, IPSec and tunneling agents
- VPN with 3DES, AES128, AES256 support
- RADIUS authentication
- Multi-level user access management
- SSH/SSL (128-bit encryption)
- Enable/disable ports, MAC based port security
- Port-based network access control (802.1x)
- VLAN (802.1Q) to segregate and secure network traffic
- SNMP v3 encryption, integrity and authentication
- RUGGEDCOM APE & VPE1400 allows for integration of 3rd party software solution like CheckPoint, SecureNOK and other cyber security solutions
- CloudConnect for RUGGEDCOM APE & VPE allows for secure connections to various Cloud solutions
- RUGGEDCOM CROSSBOW SAC for NERC-CIP enforcement

Routing

- MPLS
- VRRP, OSPF, BGP, IS-IS
- DHCP agent (option 82 capable)
- Traffic prioritization, NTP server
- IP multicast routing
- Protocol-Independent Multicasting (PIM)

Switching

- MSTP 802.1Q-2005
- RSTP (802.1w) and enhanced Rapid Spanning Tree (eRSTP) network fault recovery (<5 ms)
- Quality of Service (802.1p) for real-time traffic
- VLAN (802.1Q) support
- Link aggregation
- Traffic prioritization
- Transaction-based configuration with rollback
- GMRP and GVRP support

WAN

- Frame Relay RFC 1490 or RFC 1294
- PPP
- PAP, CHAP authentication
- IEC 61850 GOOSE messaging support

19" Ethernet Layer 2 switches

Rack-mounted Ethernet Layer 2 switches deliver utility-grade performance, reliability and field-proven MTBF to lower OPEX costs.



RUGGEDCOM RSG2100

19-port modular managed Ethernet switch with Gigabit uplinks

- 3 x 1000BASE-X + 16 x 10/100BASE-X
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RSG2100P

19-port modular managed PoE Ethernet switch with Gigabit uplinks

- 3 x 1000BASE-X + 16 x 10/100BASE-X
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RSG2200

9-port managed Gigabit Ethernet switch

- 1000BASE-X and/or 10/100/1000BASE-T
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RST2228 New

28-port high density managed field modular IEEE 1588 switch with 10 Gbit/s uplinks

- 4 x 1000BASE-X/10GBASE-X uplinks
- Up to 24 x 10/100/1000BASE-X ports
- Field-modular 4-port modules for added flexibility
- IEEE 1588 v2 with hardware time stamping



RUGGEDCOM RST2228P New

28-port high density managed PoE field modular IEEE 1588 switch with 10 Gbit/s uplinks

- 4 x 1000BASE-X/10GBASE-X uplinks
- Up to 24 x 10/100/1000BASE-X ports
- Field-modular 4-port modules for added flexibility
- Power-over-Ethernet with a shared power budget of 500 Watt with 803.bt draft (60 Watt/port)
- IEEE 1588 v2 with hardware time stamping



RUGGEDCOM RSG2300

32-port managed Ethernet switch with Gigabit uplinks

- 24 x 10/100BASE-TX + 8 x 10/100BASE-X or 4 x 100/1000BASE-X and 4 x 10/100BASE-X
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RSG2300P

32-port managed Ethernet switch with Gigabit uplinks

- 24 x 10/100BASE-TX + 8 x 10/100BASE-X or 4 x 100/1000BASE-X and 4 x 10/100BASE-X
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RSG2488

28-port advanced utility-grade, high density managed IEEE 1588 Gigabit Ethernet switch

- Field replaceable Ethernet and time synchronization media modules
- Hot-swappable power supplies
- 28 x 1000BASE-X non-blocking architecture
- IEEE 1588 v2 hardware time stamping

Compact Ethernet Layer 2 switches

Compact Ethernet Layer 2 switches are designed for tight spaces and come with a full array of intelligent functionality for robust operation in harsh industrial environments.



RUGGEDCOM RS900

9-port managed Ethernet switch with fiber uplinks

- 6 x 10/100BASE-TX + 3 x 100BASE-FX
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RS900G

10-port managed Ethernet switch with Gigabit uplinks

- 8 x 10/100BASE-TX + 2 x 1000BASE-X
- Railway application certification: EN50121-4
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RS900GP

10-port managed PoE Ethernet switch with Gigabit uplinks

- 8 x 10/100BASE-TX 802.3af/at compliant ports
- Up to 2 x 10/100/1000BASE-T or 2 x 100/1000BASE-X



RUGGEDCOM RSG907R New

7-port managed Gigabit IEEE 1588 compatible RedBox and Ethernet switch supporting HSR and PRP.

- 3 x RNA (Redundant Network Access) and coupler SFP Ethernet ports according to IEC 62439-3 (1000BASE-X)
- 4 x SAN (Singly Attached Node) LC fiber optic ports (100BASE-FX)
- IEEE 1588 v2 (Ordinary and Transparent Clocks)



reddot award 2018
winner industrial design



RUGGEDCOM RSG908C New

8-port managed Gigabit IEEE 1588 compatible Ethernet switch.

- 4 x SFP Uplink Ethernet ports (1000BASE-X)
- 4 x LC fiber optic ports (100BASE-FX)
- IEEE 1588 v2 (Ordinary and Transparent Clocks)



reddot award 2018
winner industrial design



RUGGEDCOM RSG909R New

9-port managed Gigabit IEEE 1588 compatible RedBox and Ethernet switch supporting HSR and PRP.

- 3 x RNA (Redundant Network Access) and coupler SFP Ethernet ports according to IEC 62439-3 (1000BASE-X)
- 6 x SAN (Singly Attached Node) RJ45 copper Ethernet ports (10/100/1000BASE-TX)
- IEEE 1588 v2 (Ordinary and Transparent Clocks)



reddot award 2018
winner industrial design



RUGGEDCOM RSG910C New

10-port managed Gigabit IEEE 1588 compatible Ethernet switch.

- 4 x SFP Uplink Ethernet ports (1000BASE-X)
- 6 x RJ45 copper Ethernet ports (10/100/1000BASE-TX)
- IEEE 1588 v2 (Ordinary and Transparent Clocks)



reddot award 2018
winner industrial design



RUGGEDCOM RSG920P

20-port managed Gigabit Ethernet switch with PoE

- 12 x 10/100/1000BASE-T + 4 x 100/1000BASE-X SFP + 4 x 10/100/1000BASE-T PoE (802.3af/802.3at)
- Powers up to 4 PoE enabled devices when used with optional RPS1300 companion power supply



RUGGEDCOM RS940G

8-port managed Gigabit Ethernet switch

- 6 x 10/100/1000BASE-T + optional 2 x 1000BASE-X
- Hazardous location certification: Class 1 Division 2



RUGGEDCOM RS950G

Managed Gigabit PRP/HSR RedBox

- 1x 100/1000BASE-X combo port (local/coupler)
- 2x 100/1000BASE-X combo ports (RNA)
- Gigabit throughput



RUGGEDCOM i800 product family

Unmanaged or managed Ethernet switch

- Four models to choose from with up to 8 x 10/100BASE-TX and up to 3 x fiber ports
- -20° C to + 60° C operating temperature (-40° C to + 85° C optional)
- i800: 8 x 10/100BASE-TX
- i801: 8 x 10/100BASE-TX + 1 x 1000BASE-LX or 1 x 10/100/1000BASE-T
- i802: 6 x 10/100BASE-TX + 1x 100BASE-FX or 2 x 100BASE-FX or 2 x 1000BASE-LX or 2 x 10/100/1000BASE-T
- i803: 4 x 10/100BASE-TX + 1 x 100BASE-FX + 2 x 1000BASE-LX or 2 x 100BASE-FX

Cellular routers

4G LTE cellular routers provide high bandwidth and reliable remote data communication over long distances.



RUGGEDCOM RM1224

4-port Fast Ethernet switch

- One digital input and one digital output
- 2 SMA ports for Wireless WAN Interface (4G/3G/2G) with uplink speeds up to 100 Mbit/s
- 4 x 10/100BASE-TX
- C-/KEY-PLUG slot for configuration storage



RUGGEDCOM RX1400

Multi-protocol intelligent node

- Integrated power supply
- 4 x 10/100BASE-TX, 2 x 1000BASE-X SFP
- Optional 2 R-SMA interface for WLAN interface (Access Point/Client)
- Optional LTE 4G cellular modem
- Optional virtual machine environment

Compact EoVDSL2 switches

Compact form factor Ethernet switches with EoVDSL2 uplinks provide the flexibility to use legacy copper or optical infrastructure in harsh environments.



RUGGEDCOM RSL910

Compact Ethernet switch with EoVDSL2 uplinks

- 2 x 100/1000BASE-X SFP uplink ports
- 6 x 10/100BASE-TX device ports
- 2 x EoVDSL2 uplink ports with terminal blocks
- Integrated 24 VDC, 48 VDC or HI voltage power supply
- RS232 console port and failsafe relay output

Serial device servers

Serial device servers are designed to increase ROI of legacy serial devices, reduce serial cabling costs and provide remote accessibility to lower management costs.



RUGGEDCOM RS400

4-port serial device server with integrated 4-port managed Ethernet switch

- 4 x RS485/RS422/RS232 serial ports (DB9, RJ45, or screw terminals)
- + 4 x 10/100BASE-TX



RUGGEDCOM RS401

4-port serial device server with integrated 4-port managed Ethernet switch

- 4 x RS485/RS422/RS232 serial ports (DB9, RJ45, or screw terminals)
- + 4 x 10/100BASE-TX



RUGGEDCOM RS416

16-port serial device server with integrated 4-port managed Ethernet switch and IEEE 1588 v2 to IRIG-B conversion

- Up to 16 serial ports: RS485/RS422/RS232 via DB9/RJ45 or fiber serial interface via ST
- + 4 x 10/100BASE-TX
- Optional dual redundant power supplies



RUGGEDCOM RS910

2-port serial device server with integrated 3-port managed Ethernet switch

- 2 x serial ports (RS485/RS422/RS232 via DB9, RJ45 or fiber-serial interface via ST) + 3 x 10/100BASE-X



RUGGEDCOM RMC30

2-port serial device server

- RS232/RS422/485 serial to IP conversion

Common features

- Support for Modbus TCP, Raw Socket, DNP3, TIN serial protocols
- Allows any serial protocol to be transmitted over an IP network

Media converters

Ethernet media converters are designed to bridge the gap between copper and fiber-optic network segments, reducing installation and configuration costs.



RUGGEDCOM RMC

Ethernet media converter
(copper-to-fiber)

- 10BASE-T to 10BASE-FL
- 100BASE-TX to 100BASE-FX



RUGGEDCOM RMC20

Serial media converter
(copper-to-fiber)

- RS485/RS422/RS232 conversion to multimode fiber and back



RUGGEDCOM RMC40

4-port Ethernet media and speed converter

- 10/100BASE-TX to 100BASE-FX or 10/100BASE-TX
- Provides media and speed conversion
- Unmanaged switch



RUGGEDCOM RMC41

2-port Ethernet media and speed converter

- 10/100BASE-TX to 100BASE-FX converter



RUGGEDCOM RMC8388

Compact time protocol converter

- PTP (IEEE 1588) to IRIG-B (AM or TTL)
- PTP (IEEE 1588) to PPS
- IRIG-B AM to PTP (IEEE 1588)

Compact power injectors & supplies

Compact power injectors and supplies help reduce costs by eliminating separate power and data cabling requirements.



RUGGEDCOM RP100

Single port PoE injector

- 802.3af/802.3at compliant version
- RUGGEDCOM WIN compliant version
- -40° C to +85° C operating temperature (no fans)



RUGGEDCOM RP110

Serial PoE injector

- 802.3af/802.3at compliant version
- RUGGEDCOM WIN compliant version
- 1 x RS422/485 + 1 x RS232
- IRIG-B output
- Transmits serial data over an IP network
- Support for Modbus TCP, DNP3, TIN serial protocols
- Raw socket mode allows tunneling of any serial protocol
- -40° C to +85° C operating temperature (no fans)



RUGGEDCOM RPS1300

140 W PoE 54 VDC power supply

- Input voltage: 120 VAC, 230 VAC
- Output voltage: 54 VDC
- -40° C to +75° C operating temperature
- NEMA TS-2 rated

Wide area private wireless systems

Private wireless WAN solutions enable secure long-range connectivity, extending IP networks over long distances to fixed and mobile users.



RUGGEDCOM WIN5100

Vehicular subscriber unit

- 2 antennas for external connection
- Powered directly through 12 VDC, 24 VDC or PoE
- Optimized for AeroMACS (Aeronautical Mobile Airport Communications System)



RUGGEDCOM WIN5100-V

Enhanced vehicular subscriber unit

- 10/100BASE-TX M12 interface
- 2 antennas for external connection
- Powered directly with 9-36 VDC
- Optional GPS
- Optimized for AeroMACS



RUGGEDCOM WIN5200

Outdoor subscriber unit with PoE

- High gain integrated antenna
- Compatible with RP100/110
- Optimized for AeroMACS



RUGGEDCOM WIN7000

High power base station

- High output power of 2 x 36 dBm
- Single cable power and Ethernet, or fiber-optic interface options



RUGGEDCOM WIN7200

Base station

- Small form factor and low power consumption
- Power-over-Ethernet (PoE) single cable design
- Optimized for AeroMACS

Common features

- Available in multiple frequencies
- Over the air IEC 61850 GOOSE messaging support
- Seamless mobility in standalone mode
- Excellent performance in NLOS conditions
- Greater than 40 Mbps aggregate throughput
- Mobile-WiMAX compliance based on IEEE 802.16e standard and WiMAX Forum Wave2 (MIMO) certification
- Standalone solution for deployment without additional servers support

MIL-STD products

Military standard products are designed to operate in harsh environments and meet and exceed strict specifications of the defense industry.



RUGGEDCOM M969

10-port managed Ethernet switch with fiber uplinks

- MIL-STD and IP66/IP67 rated
- 8 x 10/100BASE-TX + 2 x 1000BASE-X



RUGGEDCOM M2100

19-port modular managed Ethernet switch

- 3 x 1000BASE-X + 16 x 10/100BASE-X



RUGGEDCOM M2200

9-port managed Gigabit Ethernet switch

- 1000BASE-X and/or 10/100/1000BASE-T



RUGGEDCOM MX5000

Multi-Service Platform

- High-density MIL-STD rated switch and router
- Supports up to 50 fiber or 98 copper ports



RUGGEDCOM MX5000RE

Multi-Service Platform with enclosure

- MIL-STD switching/routing platform
- IP65 EMI/EMC/shock/vibration-rated enclosure
- Replaceable enclosure

Certifications

- MIL-STD 901D – shock (hard mounted)
- MIL-STD 167 – vibration
- MIL-STD 461 – EMI
- MIL-STD 1399 – DC magnetic field exposure
- MIL-STD 810 – temperature and humidity

RUGGEDCOM software solutions

Rugged communications equipment requires equally rugged software. The RUGGEDCOM product line offers first-rate solutions for network management, secure remote IED access, data conversion, routing and visualization.

A modern substation contains vast amounts of data, subsets of which are of interest to control center or enterprise applications and users. RUGGEDCOM software solutions have been developed to help the electric utility industry by providing secure access to this data, processing it into useful information and making it available in a usable format to a wide range of users and enterprise systems.

RUGGEDCOM CROSSBOW

An enterprise level solution for managing and securing remote maintenance access to field devices in compliance with the NERC CIP standards. Offers tremendous ease of use, and unique automation capabilities for change management applications.

Features:

- Secure remote access
- Authenticate users against IT systems
- Automate user login
- Manage device passwords and configurations
- Control, log, and report user access

RUGGEDCOM ELAN

RUGGEDCOM ELAN modular, Linux/ROX-based substation servers and front-end processors excel at accessing all types of device data, and getting it to the clients that require it.

Features:

- Preserves investment in legacy devices and control center applications
- Supports both SCADA and non-SCADA hosts, such as data historians
- Protocol conversion and routing, real-time engine with support for most commonly used protocols
- Automated event file retrieval from major relay vendors
- Powerful automation processing capabilities

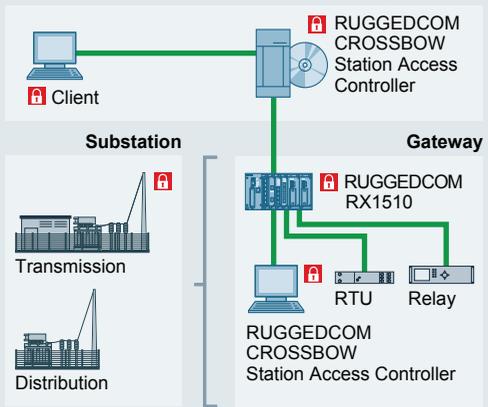
RUGGEDCOM REFLEX

RUGGEDCOM REFLEX is a monitoring and control application purpose built for distribution networks, allowing the creation of systems that cover the spectrum from single user HMI to mobile distribution management to enterprise level monitoring and control.

Features:

- Single line visualization
- Graphic trending of values
- Alarm summary and alerting
- Report generation
- Web-launched client
- Integrated data historian

Electronic Security Perimeter



G_ROMO_XX_90021

The screenshot shows the SIEMENS RUGGEDCOM ELAN software interface. The main window displays a table of ELAN Remote Devices (RTU/IED) with columns for Region, Device Name, RTU, Port, Status, Tx Messages, Rx Messages, Rx Errors, Rx Timeouts, and Consecutive Rx Timeouts. A secondary window shows a detailed view of a device's status, including Point Name, Point Value, Status, and Timestamp.

Region	Device Name	RTU	Port	Status	Tx Messages	Rx Messages	Rx Errors	Rx Timeouts	Consecutive Rx Timeouts
Distribution Sub	Sub101 ELAN	10	18	Off-Line	4980	0	0	4980	4980
	Copper CLB	0	9	Config Error	0	0	0	0	0
	Copper CB	0	10	Config Error	0	0	0	0	0
	SEL311E	0	11	Config Error	0	0	0	0	0
IED Faceplates	IED301-001	0		Remote Device - IED Faceplates-Copper CLB - Modbus Protocol					
	IED30105	0		IED30105					
	IED30103	0		IED30103					
	IED30109	0		IED30109					
	IED30111	0		IED30111					
	IED30104	0		IED30104					
	IED30102	0		IED30102					
	IED30106	0		IED30106					
	IED30107	0		IED30107					
	IED30108	0		IED30108					
	IED30100	0		IED30100					
North	IED30101	4		IED30101					
	IED30103	3		IED30103					
Southwest	IED30102	5		IED30102					
	IED30105	351		IED30105					
	Copper CLB	1		Copper CLB					
Substation	IED30100	10		IED30100					
	IED30101	1		IED30101					
West	IED30102	2		IED30102					

RUGGEDCOM NMS

RUGGEDCOM NMS is a scalable, fully-featured, enterprise grade solution for monitoring, configuring and maintaining RUGGEDCOM mission-critical networks.

It improves operational efficiency, speeds up system provisioning, and preserves data validity, while allowing focus on the key events on the network.

Features:

- Centralized web based management of your RUGGEDCOM and IP-network
- Auto-discovery of device links and services and representation on a network map
- Real-time monitoring and notification of events, alarms and thresholds
- Continuous collection of traffic statistics for analysis and reporting
- Deployment of firmware/software upgrades across RUGGEDCOM devices
- Automatic backup of RUGGEDCOM device configuration data
- Creation of templates and propagation of configuration changes across ROX II devices
- Monitors ROS and ROX II configurations and reports changes that exceed the authorized user-defined boundaries
- Bulk password changes of ROS, ROX I and WIN based RUGGEDCOM devices

Availability			
Availability (last 24 hours)		100.000%	
172.30.128.249	Overall	100.000%	
	HTTP	100.000%	
	HTTPS	100.000%	
	ICMP	100.000%	
	Route	Not Monitored	
	SNMP	100.000%	
	SSH	100.000%	
	StratPing	Not Monitored	
	192.168.0.2	Overall	Not Monitored
	192.168.2.2	Overall	Not Monitored
192.168.10.2	Overall	Not Monitored	
192.168.11.1	Overall	Not Monitored	
192.168.11.2	Overall	Not Monitored	
192.168.12.1	Overall	Not Monitored	
192.168.13.1	Overall	Not Monitored	

RUGGEDCOM Edge Computing Solutions

The RUGGEDCOM product line offers solutions and innovations to provide robust network stability and efficiency, allowing you to take your intelligence to the network edge.

RUGGEDCOM VPE1400

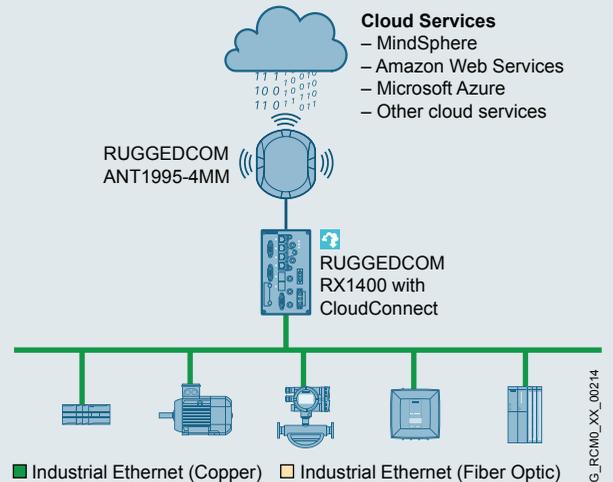
The RUGGEDCOM VPE1400 provides a virtualized environment to run a guest Linux operating system and third party applications on the RX1400, enabling intelligence at the network edge. Virtualization allows a full Linux image (with dedicated storage media and I/O ports) to run in parallel with the RUGGEDCOM ROX II, using a Linux KVM (Kernel Virtual Machine) based solution. The KVM ensures that the guest OS and third party applications can run without impacting RUGGEDCOM RX1400 core services running on the system.

RUGGEDCOM RX1400 with CloudConnect

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.

Features:

- Web Based Stand Alone Configuration
- Optimized data traffic based on Publish/Subscribe mechanisms
- Trigger Management for Event Driven and Cyclic Communication





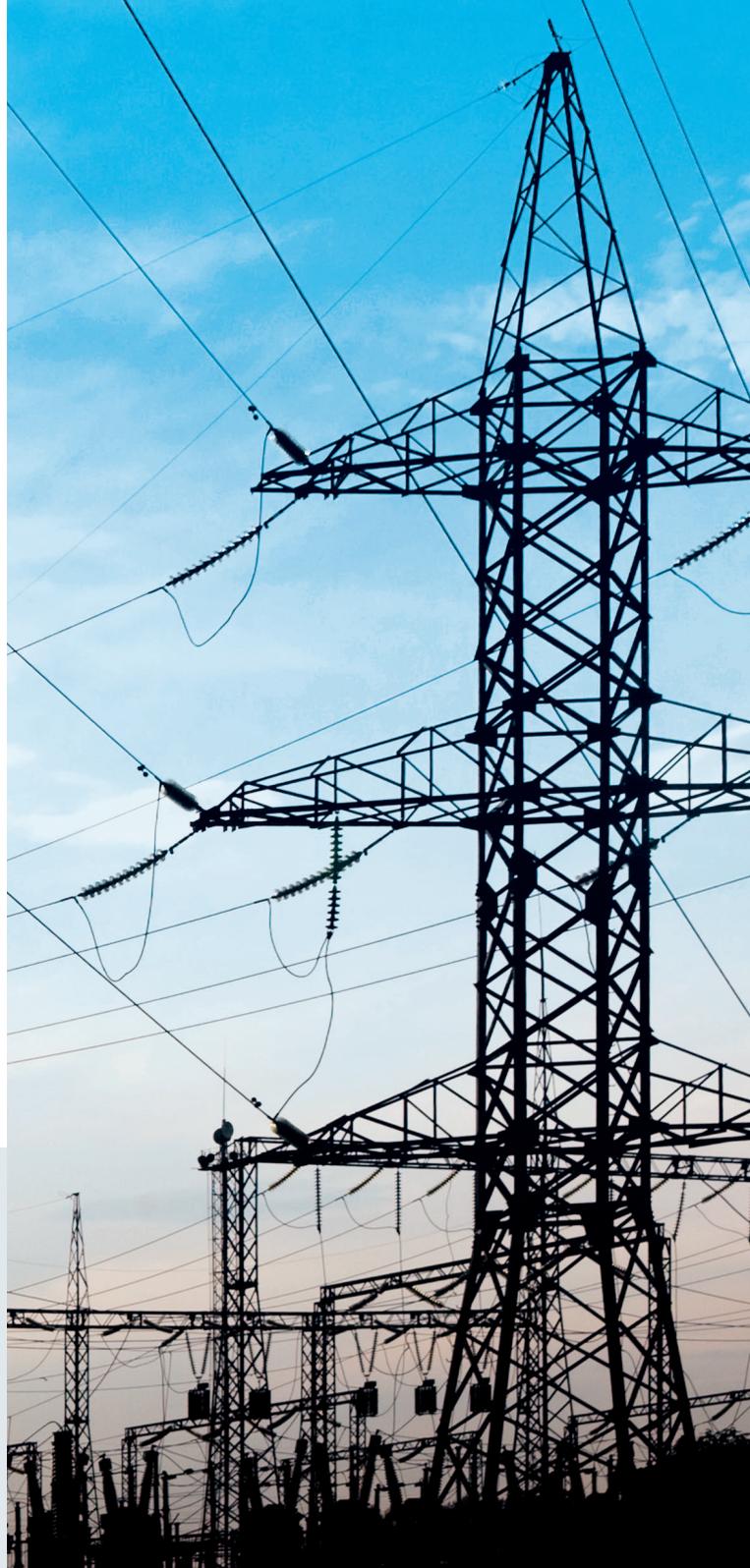
The tool for selection
and configuration of
RUGGEDCOM products.

RUGGEDCOM Selector

With the RUGGEDCOM Selector you can transfer the order number to the Siemens Industry Mall and order your products.

To use the RUGGEDCOM Selector for the selection and configuration of RUGGEDCOM products, visit: [siemens.com/ruggedcom-selector](https://www.siemens.com/ruggedcom-selector)

For more information on wireless approvals, visit: [siemens.com/wireless-approvals](https://www.siemens.com/wireless-approvals)



FastConnect™ Cabling System

Stringent demands are placed on the installation of cables in an industrial environment. Siemens offers FastConnect™, a system that fulfils all these requirements: on-site assembly – quick, easy and error-free. For more information, visit: [siemens.com/fastconnect](https://www.siemens.com/fastconnect)