

SIEMENS
Ingenuity for life



Communication networks designed for the future

Professional Services for Industrial Networks

products.electro-matic.com/industrial-automation/industrial-communication

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Industrial Networks Professional Services from Siemens



Our offer at a glance

Industrial Networks Professional Services

On-Site Service/Support

Design and Consulting

Integration and Deployment

Training Services

Getting more from your network, means getting more business.

Industrial and mission-critical enterprises are increasingly digitalizing their operations. Processes are becoming more and more integrated at all levels and data volumes continue to grow at exponential rates. Communication networks have never been more important – also for maintaining a competitive advantage in dynamic market environments. Implementing state-of-the-art network solutions that ensure secure, reliable and flexible communications is one thing. However, leveraging the full potential of today's complex digital architectures definitely requires expert support. With extensive vertical market experience in designing and implementing communication networks that stand the test of time, a trusted partner like Siemens or a certified solution partner can ensure increased business success and future-readiness.

The Siemens Industrial Networks Professional Services difference

Why partner with us? With a market-leading portfolio of rugged, standards-based communications technologies and an in-depth understanding of network designs, we are well positioned to assist you in developing an integrated industrial network solution that precisely suits your needs.

Our extended offering also comprises cutting-edge solutions for automation environments and other mission-critical industry applications, including electrical power, oil and gas, and transportation.

At Siemens, we have the know-how, the experience and the products to bring your industrial network plans to life – and in full compliance with all regulatory guidelines.

On-Site Service and Support



Gaining a clear overview

Creating a customized industrial network solution begins with a little investigation. With an on-site visit, we can conduct a thorough assessment of the existing network, identify potential performance issues or security vulnerabilities, and develop a specification of needs. Conducted together with the client, our on-site services are designed to take stock of the current network, gauge against our client's goals, and provide a consultative roadmap for a future-ready and secure network. Our Industrial Network Audit or the Network Security Assessment can significantly reduce time and costs, give you peace of mind that your network is secure, and ensure smooth future project implementations.

Industrial Network Health Check

The documented audits and certifications frequently include information on:

- Existing network architectures
- Device inventory
- Suggestions for improvements

Benefits

- Continuous network monitoring and supervision
- Event anticipation and resolution prior to occurrence
- Troubleshooting
- Pinpoints network weaknesses offering potential for optimization



Network Security Assessments

Gain essential insights through in-depth analysis to identify and gauge security vulnerabilities within your existing network architecture, recommended actions and help with implementing security solutions.

- Discovery and analysis
- Vulnerability assessments
- Audit reports
- Implementation plans
- Design, development and delivery of security solutions

Benefits

- Uncovers vulnerabilities and potential risks in the current network architecture
- Captures and documents details of findings and recommendations
- Provides a path forward to close gaps and protect people and assets. Pinpoints network weaknesses offering potential for optimization



Learn more or visit
usa.siemens.com/network-security

Design and Consulting



Working out the details

As part of our Network Design and Consultation services, we conduct a thorough analysis of the existing network and infrastructure performance. Whether the choice is Network Design Services or our Radio Frequency (RF) Planning and Site Assessment, we explore network improvement options through a process of technical consultations with our clients. The result is a tailor-made network solution designed specifically for each application.



Network Design Services

Whether for a new or existing network, an expansion or optimization, no matter the scale, our qualified experts can assist you in making it happen.

- Definition of parameters: network segmentation, redundancy protocols in layer 2 and 3, IP plan and routing protocols
- Creation of wiring diagrams and network port assignments
- Definition of firewall rules and cyber security components

Benefits

- Proper network implementation
- Elimination of ad hoc configurations
- Documented network design

Radio Frequency (RF) Planning and Site Survey Services

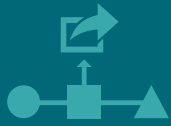
To successfully engineer a network implementation, expansion or modernization, it helps to get a clear picture of how well the current wireless network is performing.

- Definition of RF coverage
- Frequency assignment to avoid interferences
- Assess RF interference in the area
- Infrastructure consultation and support
- Confirmation of physical location and surrounding
- Fine-tuning of RF design specifications
- Optimization of RF performance environment
- Analysis of structural surrounding conditions

Benefits

- Simulation of RF coverage
- Documented radio channel planning
- Overview and documentation of coverage prior to implementation
- Elimination of ad hoc configuration
- Consultation and support with frequency planning
- Verification of radio channel planning
- Avoidance of interference
- Detailed bill of materials for installation to avoid scope gaps

Integration and Deployment



Putting it into place

Failure of critical communications equipment is one of the worst nightmares for any industrial or mission-critical operation. Minimizing the likelihood of a network malfunction and quickly getting it back up and running is what our Pre-Configuration & Testing measures and our Implementation Services are all about.

Pre-Configuration & Testing Services

Our certified experts pre-configure and thoroughly test hardware prior to deployment.

- Creation of configuration files for upload to network components
- Pre-configuration of hardware according to project specifications prior to delivery
- Factory Acceptance Testing (FAT) of equipment prior to delivery

Benefits

- Reduction of on-site installation time
- Correct network operation even before hardware delivery
- Baseline configuration prior to on-site testing



Implementation Services

Quickly getting your industrial network up and running securely and reliably is another area in which our professionals excel in.

- Configuration of hardware according to project specifications
- Equipment testing
- Installation and commissioning of SCALANCE and RUGGEDCOM network components through qualified partners and subcontractors

Benefits

- Fast, accurate on-site project implementation based on years of experience, training and certification





Training Services



Bringing it to life

Once implemented, it's important that the technical staff is quickly trained on properly operating and maintaining the new network. Given the complexity of modern enterprise-wide networks, it is essential to have an understanding of the "big picture." The interconnections between production/operations and IT systems are thoroughly analyzed in the trainings we offer, which include certifications and customized courses (workshops).

**Standard and Customized Courses**

Our standard training services cover three areas of expertise and are designed to provide participants both operations-specific knowledge as well as hands-on experience.

- Switching and Routing in Industrial Networks
- Wireless LAN or WiMAX in Industrial Networks
- Security in Industrial Networks

Upon request, our experts will also tailor course content to meet specific objectives.

Benefits

- Gain industrial network expertise
- Proficiency in latest tactics and technologies
- Real-life learnings
- Increased network security, reliability and flexibility

Learn more at
usa.siemens.com/yourcertification





Professional Services Fixed Price Offerings





While many of our services are custom-tailored to your unique requirements, we also offer a variety of fixed price services, where the scope of work is predefined, making it quick and easy to order. The details of these fixed offerings, order numbers and prices follow.

Pre-Deployment Consultancy Services

Order Number: 6GK60001AM000AA0

Price: \$6,700

- Up to Two (2) days onsite Consultancy Services; to include:
- Review customer requirements and needs for an Industrial Network.
- Discuss and whiteboard various network architecture topologies.
- Suggest product, configuration and protocol options.
- Review and finalize RUGGEDCOM/ SCALANCE products and solutions bill of materials.

Notes:

- Travel, lodging & per-diem are included.
- Schedule should be mutually agreed.
- Health and Safety requirements shall be communicated prior to start of activities.
- The Siemens Industrial Networks Professional Services difference

Onsite Project Consultancy Services

Order Number: 6GK60001AM001AA0

Price: \$10,500

- Up to Four (4) days onsite Consultancy Services after purchase of the products; to include:
- Review of network design.
- Provide an orientation of the RUGGEDCOM/ SCALANCE products purchased as part of the project.
- Review recommended configuration & implementation plan.
- Perform configuration of a pre-defined number of products.
- Provide over-the-shoulder training.

Notes:

- Travel, lodging & per-diem are included.
- Schedule should be mutually agreed.
- Health and Safety requirements shall be communicated prior to start of activities



More Fixed Price Offerings

Remote Project Consultancy Services

Order Number: 6GK60001AM006AA0

Price: \$4,800

Up to Twenty-Four (24) hours Remote Consultancy Services during or after deployment of the products; to include:

- Configuration support.
- Troubleshooting network errors and protocol parameters.
- Tweaking the system as required.
- Assisting with network tests.

Notes:

- This work is done remotely and a network consultant, who will work with the customer during the deployment phase, will be assigned for this purpose.
- Schedule should be mutually agreed.
- Required documentation and information should be provided to the consultant prior to start of the support.
- All network components should be accessible through a secure VPN.

RUGGEDCOM NMS System Review Services

Order Number: 6GK60001AM005AA0

Price: \$8,600

Up to Three (3) days onsite NMS System Review Services; to include:

- Review of the NMS configuration.
- Perform adjustments, if needed.
- Tweaking the system and adding additional devices, if needed.
- Provide a refresher session of NMS orientation.
- Provide a summary of the findings and recommendations after completion of the trip.

Notes:

- Travel, lodging & per-diem are included.
- Schedule should be mutually agreed.
- Health and Safety requirements shall be communicated prior to start of activities.
- All network components should be accessible from a single location.

Wired or Wireless Industrial Network Assessment Services

Order Number: 6GK60001AM004AA0

Price: \$14,000

Up to Four (4) days onsite Wired or Wireless Industrial Network Assessment Services; to Include:

- Review Industrial Network Architecture.
- Analyze Siemens' Switches, Routers, RUGGEDCOM WIN, Wireless Access Points (WAP) configurations.
- Perform tests to benchmark network performance.
- Verify data communication for errors (packet loss, protocol errors), operating state of the devices and utilization of the network devices using Siemens network management software or other packet capture methodology.
- Review operation & maintenance procedure. i.e. backup and restoration plan and procedures.
- Provide a network assessment report with findings and recommendations after completion of the trip.

Notes:

- Travel, lodging & per-diem are included.
- Schedule should be mutually agreed.
- Health and Safety requirements shall be communicated prior to start of activities.
- All network components should be accessible from a single location.



**Implementation of Broadband Wireless Server Gateways****Order Number:** 6GK60001AM002AA0**Price:** \$8,600

Up to Three (3) days onsite Implementation services; to include one of the following options:

OPTION 1 - SAS Gateway Implementation Scope of Services:

- Installing RUGGEDCOM SAS-GW.
- Connecting to the SAS.
- Managing SMS alerts.
- Configuring RUGGEDCOM SAS-GW.
- User accounts.
- Base Stations.
- Subscribers.
- Monitoring RUGGEDCOM SAS-SW.

OPTION 2 - Authentication/Authorization/Accounting (AAA) Server Implementation Scope of Services:

- Installation of operation System (Linux) and free radius.
- AAA server basic configuration.
- Synchronizing AAA configuration with Base Stations to facilitate CPE to Base Station authentication for wireless network.
- AAA orientation to the customer.

Notes:

- Software & hardware costs for SAS Gateway/AAA Server are not included in the price.
- Travel, lodging & per-diem are included.
- Schedule should be mutually agreed.
- Health and Safety requirements shall be communicated prior to start of activities.

RUGGEDCOM CROSSBOW System Review Services**Order Number:** 6GK60001AM003AA0**Price:** \$10,500

Up to Three (3) days onsite CROSSBOW System Review Services; to Include:

- Review CROSSBOW System architecture and implementation.
- Determine specific use cases of CROSSBOW.
- Timing Benchmarks.
- DB load time.
- Global alert load time.
- Automation load time.
- Device property load time.
- Device property save time.
- Connected user load time.
- Examine database for irregularities (version dependent).
- Review access policy.
- Characterize and optimize automation.
- Review devices types.
- Review clones.
- Review edited scripts.
- Review latest features.
- Provide a summary of the findings and recommendations after completion of the trip.

Notes:

- Travel, lodging & per-diem are included.
- Schedule should be mutually agreed.
- Health and Safety requirements shall be communicated prior to start of activities.
- Upgrade of the CROSSBOW system can be added to the visit @ an additional cost price depends on the extent and size of the CROSSBOW installation at the customer facility.



For more information on any of our customized services or to order our fixed services, simply reach out to your local Siemens Account Manager / Consultant. Or you can email us at siemensci.us@siemens.com





Industrial Networks Professional Services Quality Indicators

Certified professionals with the ongoing commitment to continuing education.

Knowledge of Industrial Ethernet standards.

Detailed understanding of Siemens SCALANCE and RUGGEDCOM products acquired through hands-on design, and field commissioning and testing.

FOR MORE INFORMATION, CONTACT:

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**Published by
Siemens Industry, Inc. 2019**

Industrial Networks Professional Services
5300 Triangle Parkway
Norcross, GA 30092

Subject to change without prior notice

Article No. NTBR-INPSS-1119

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Printed in USA

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