



+ SCADA Systems

With the wide range of Remote Terminal Units (RTUs) and Programmable Logic Controllers (PLCs) currently on the market, SCADA system engineers and decision makers face several challenges.

Complex processes demand a high degree of system-level intelligence. A vast majority of large infrastructure and industrial scale ventures use Supervisory Control and Data Acquisition (SCADA) systems. The Power Utility industry alone uses SCADA at more than 50% of their installations.

SCADA systems provide monitoring, control, and automation functions that allow the enterprise to improve operational reliability, reduce costs through eased work force requirements, enhance overall Quality of Service (QoS), or meet expected QoS or other key performance factors as well as boost employee and customer safety.



Key examples of SCADA applications include:

Public or private infrastructure

- Water treatment and distribution
- Wastewater collection and treatment
- Electrical power transmission and distribution
- Oil and gas pipeline monitoring and control

Industrial processes (continuous, batch or repetitive)

- Remote monitoring and control of oil & gas production, pumping, and storage at refineries from both offshore platforms and onshore wells
- Electrical power distribution from nuclear, gas-fired, or coal

We provide electronic and software system design and development for advanced energy data collection, communication, and management systems including ruggedized computing and communication devices for intelligent RTUs that require very high performance and system-level intelligence expectations that standard PLCs cannot meet.

Continued on reverse

“The strong partnership we enjoy with Vanteon has helped us refine our own competencies, as well as expand our technological options into the vast domains offered by Vanteon’s technical staff.”

Eric Raamot, Vice President of Engineering,
Econolite Control Products, Inc.



Low-power wireless systems, integration with legacy protocols, cellular data transmission systems, as well as emerging communication network standards all play a part in creating the next generation of SCADA systems.

Our engineering team has delivered completed systems, components, and software modules for use in SCADA applications. Our royalty-free WaveCaster™ Software Defined Radio Intellectual Property offers many possibilities for communication flexibility with SCADA systems.

With the rapid expansion of remote site monitoring and control, three critical industry business trends have recently come into focus:

- System performance and intelligence
- Communication flexibility
- Configurability and reduced costs

At the technical level, several requirements currently influence the SCADA specification process:

- Local intelligence and processing
- High-density, fast, highly accurate I/O modules
- Strict adherence to open standard industry protocols (Modbus, DNP3, DF-1)
- High-speed communication ports
- Broadband wireless and wired IP communications
- Robust protocols
- Protection of critical infrastructure

Electronic Systems

- Feasibility studies
- Requirements definition
- Architecture, design & development
- Prototyping & integration
- Testing and certification
- Manufacturing transition and support

Quality Assurance and Testing

- IV&V for software and hardware systems
- Certification, regulatory and standards testing
- Customized software & device testing

Software Engineering

- Host drivers, mobile apps, middleware
- Porting, localization, SDK development
- Java, Linux, Macintosh, Windows

Embedded Systems Engineering

- Board design, layout, signal integrity
- Drivers, BSPs, stacks, applications, SDKs
- FPGAs, DSPs, 32-bit & multicore processors
- Wi-Fi, WiMAX, Zigbee, RFID, custom
- Software Defined Radio

Power-up your project team and contact us today at 888.506.5677 to discuss your project.

“From project planning through execution, Vanteon is very thorough, flexible, and professional. In every way, it was a pleasure to work with them!”

Jamie P. Murphy, Product Applications Manager



Celebrating over 25 years of service, innovation, and collaboration.