SCADA SOLUTIONS FOR WATER SYSTEMS



For more information on Viking Scada products or for a list of qualified installers in your area, contact:



P.O. Box 1387 Seminole, OK 74818 405-584-2396 vikingscada.com nathan@vikingscada.com





WHAT IS VIKING SCADA?

Supervisory Control and Data Acquisition (SCADA) is a system for gathering and analyzing real-time data in order to monitor and control remote equipment.

Any SCADA system has two common elements. The first is a process or system that an operator wants to monitor and control. The other important element is a network of devices, such as Viking Scada products, that interface with the system through the use of sensors and control input/outputs. The network of devices provides the capability to measure and control specific elements of the process or system.

A SCADA system performs key functions that include data acquisition, network communication, data presentation, and control. The system uses sensors, control relays, remote telemetry units, master units and a network (including wireless networks) to communicate, control and acquire data.

WHY IS VIKING SCADA THE BEST OPTION FOR WATER SYSTEMS?

Viking Scada has more than 10 years' experience manufacturing both small and large systems, and field control and monitoring systems. The Viking Scada devices provide automatic local and remote alarms for power or system failures, plus full function operation for hours during a power failure using the internal battery back-up. Viking Scada units can also allow you to remotely monitor both high and low levels of a tank and control the fill/drain pumps remotely without interconnecting wires. In a single pump and tank site, an Viking Scada device can monitor the level of a remote tank, either by an analog level transducer and/or limit switches. The local pump may be operated through a simple contactor or an adjustable analog output signal may be supplied to control the speed of a Variable Speed Drive (VSD).

HOW DO I CONTROL THE SYSTEM AND ACQUIRE DATA?

Viking Scada has developed control software based on the popular Azeotechs OTS. This software provides SCADA capability for Viking Scada products, plus other brands of hardware. OTS can be quickly customized for your system at a very economical cost, and typically does not require a site visit. Applications for this software can range from simple one-tank systems to complex oil fields and plants with hundreds of I/O points. The Viking Scada PC Application can provide:

- Alarms When alarms are tripped, the software can play audible alerts, pop-up warnings on a computer screen, dial out and speak the alarm, dial out and play .wav files, send email notices, send text messages, print an alarm report, and/or call up a radio transmitter to play an audio .wav file over a radio network. Parameters can be set for each potential alarm signal.
- Statistics The statistics are automatically accumulated and can be emailed daily if needed. Statistics are viewable at any time.
- **History** History logs are generated for all alarm events, as well as other events.
- Calibration The ability to calibrate can be invoked at any time. If a transducer needs to be replaced in the future, it is simple to recalibrate even while the program runs.



• Maintenance – OTS can track power-on, run times, starts, and events for any I/O device. The maintenance screen within the program shows the current status. Daily maintenance status reports in text format are generated and can be automatically emailed. Many operators use this feature to receive a text message or phone call when the maintenance status is at 90%.

• **Graphs** – The graphs feature can show historical values, including tank levels, pump activity, and VSD currents. Typical

applications have a 10-second time resolution and can store several months of data. All data may be exported for analysis with program such as Microsoft® Excel®.

VIKING SCADA PRODUCTS



VIKING SCADA 4

The Viking Scada 4 is a best seller,

and is designed for applications where

high-reliability is a must. The Viking

Scada 4 maintains continuous, encrypted

bi-directional communications for positive

verification of correct operation in all units

within a system. Immediate indication of

control and monitoring status at every unit

is always communicated.





The Viking Scada 16 provides more inputs and outputs than the Viking Scada 4. Operators can use the unit's nine relay contact outputs, two analog outputs, more than eight analog inputs, and more than eight switch/contact inputs. Like all Viking Scada units, the Viking Scada 16 is a cost-effective solution to installing overhead or buried cable infrastructure when connecting equipment in isolated locations.



VIKING SCADA 32

The Viking Scada 32 is Viking Scada most advanced SCADA unit to date. The fourth-generation (4G) device features a high-performance general-purpose remote terminal unit (RTU) with onboard datalogger. The Viking Scada 32 can be configured using the liquid crystal display (LCD) screen, a local computer using a variety of connections, or a remote computer using serial link, radio connection or SD-card interface.

COMMON FEATURES OF VIKING SCADA PRODUCTS

- Out-of-the-box plug-and-play operation, with the option of being preconfigured to your application and needs.
- Approximately half the cost of closest competitive units, and often cheaper than wire.
- Range of up to 40 miles with external antenna. Up to 7-mile range with standard, internal antenna. Non-line-of-sight capabilities available.
- Thousands of digital inputs, relay outputs, analog inputs, pulse inputs and analog outputs can be configured per system. Easily field-configure the unit to route any input to any output.
- Dual power supply is standard (115-Volt AC or 28-Volt DC).

- The Viking Scada is compatible with nearly all SCADA systems. Quickly and easily add wireless I/O to existing systems.
- Multiple Analog inputs may be configured for 4-20mA, 0-10V, digital or pulse inputs.
- High-reliability, industrial-grade components with wide temperature range operating capability.
- Continuous, positive verification of correct operation.
- All Viking Scada products can communicate. Use a mix of Viking Scada 4, 16 or 32s.
- Any unit can be a repeater.
- Modbus configuration, monitoring and control is integrated. RS-232 and RS-485 interfaces are standard.

VIKING SCADA ORDERING OPTIONS

The Viking Scada 4, 16 and 32 can be ordered in the three different antenna options, shown at right.



Internal Antenna



External
Antenna
with Surge
Arrestor



Antenna