# SCADA SOLUTIONS FOR OIL & GAS



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 OIL AND GAS?

Viking Scada products can monitor oil wells, pumpjacks, disposal wells, monitoring wells, observation wells, injection wells, compressors, and many more applications within the oil and gas industry.

For more than 10 years, Viking Scada products have provided a reliable, high-quality SCADA solution to oil and gas companies across the Midwest. The Oklahoma-based company's products have evolved to use fourth-generation (4G) wireless network communications to effectively transmit data and communication between units.

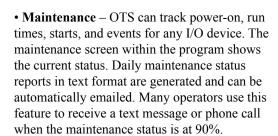
With Viking Scada experience and knowledge, many in the industry use Viking Scada products exclusively because of their ease-of-use and plug-and-play functionality. Maximizing your productivity and profitability in the field can be as easy as adding Viking Scada products and expertise to your operations.

# 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.





• **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.



### **VIKING SCADA 16**

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