

Wireless SCADAPack

Features:

- Radio module integrated in SCADAPack controllers
- Available in 900 MHz and 2.4 GHz versions
- Low power radio with 5 mA @ 12VDC sleep mode
- High speed (115.2 Kbps true data throughput)
- Class 1, Division 2 Hazardous Area Rating
- 3 year warranty on parts and labor

All Control Microsystems SCADAPack controllers are available with an integrated spread spectrum wireless transceiver, offering a flexible option for SCADA network connectivity. Each of the wireless SCADAPack controllers includes a complete Radio Module conveniently mounted under the controller cover with little change in the product's dimensions. The wireless controllers are available in 900 MHz and 2.4 GHz versions and come complete with all the functional specifications of the SCADAPack controller they are based upon. This simplified design eliminates the need for separate power supplies, cables and radio modules, resulting in a more efficient system installation.

Overview:

Compact and Powerful - The Control Microsystems wireless SCADAPack controllers provide Remote Terminal Unit (RTU) functionality with flexible programming options. The controllers are programmable in Relay Ladder Logic, IEC 61131-3 and multitasking C/C++ languages and provide real time communications using the industry standard Modbus protocol. Since the radio modules fit neatly inside each controller there is no need for extra power supplies and cables. Each controller uses a powerful processor module and is compatible with any other member in the product series.

Depending on the model, 11 to 40 process I/Os are available on the base unit, with expanded capability to over 1000.

Flexible Wireless Communications -

The SCADAPack wireless controller series eliminates the need for expensive frequency licensing by operating in the 900 MHz and 2.4 GHz bands. All wireless controllers are shipped from the factory with default communication settings for the controller and radio module and are easily re-configurable for individual systems. The embedded wireless data transceiver is configured using a standard terminal program such as Hyper Terminal.

Applications and Benefits:

As stand-alone products, all of the SCADAPack wireless controllers offer a cost-effective and powerful logic controller that can be used in either a Master or Slave configuration. Special features include report-by-exception and store-and-forward. Use of real time Modbus communication protocols simplifies integration with SCADA software, MMIs, DCS systems, intelligent instrumentation and remote I/O control applications.






With compact footprints and low power consumption, the SCADAPack wireless controllers are a natural choice for remote installations that require the same performance as PLCs and RTUs in



a wireline SCADA network. As a low cost solution the product line fits perfectly in end-to-end monitoring and control systems or in complex point-to-multipoint SCADA networks. Specific applications include fluid control and monitoring in installations where fluid level measurement and pump control are required, or in gas pipeline metering, monitoring and control. Regardless of the specific use, the SCADAPack wireless controllers offer flexible communications options and are compatible with the entire line of Control Microsystems application software including: RealFLO (Multi-run Gas Flow Computer), SCADALog (Data Logging Utility) and SCADA Server (OPC Server).

Similar in design to all SCADAPack products, the SCADAPack wireless controllers are fabricated with conformal coatings, gold-plated sockets and zinc plated steel system components. Regardless of the application, these products provide reliable and compact, stand-alone performance in the hazardous environments so often found in SCADA applications.

Wireless SCADAPack Controllers

	SCADAPack100	SCADAPackLP	SCADAPack	SCADAPack32P	SCADAPack32
					
Analog Inputs:					
On-board	3 (0-20 / 4-20 / 0-5 / 1-5 VDC) 1 (0-32.7 VDC)	5 (0-20 / 4-20 / 0-5 / 1-5 VDC) 1 (0-32.7 VDC)	8 (0-20 / 4-20 / 0-5 / 1-5 VDC)	None	8 (0-20 / 4-20 / 0-5 / 1-5 VDC)
Expansion ¹	N/A	Up to 128 channels	Up to 128 channels	Up to 128 channels	Up to 128 channels
Analog Outputs:					
On-board	None	Standard: None (2 optional)	Standard: None (2 optional)	Standard: None	Standard: None (2 optional)
Expansion ¹	None	Up to 64 channels	Up to 64 channels	Up to 64 channels	Up to 64 channels
Digital Inputs:					
On-board	6 (selectable as input or output) ⁴	8 (selectable as input or output) ⁴	20 (with 5601 module) or 32 selectable as input or output (when used with 5604 lower I/O module) ⁴	Standard: None	20 (when used with 5601 lower I/O module) or 32 selectable as input or output (when used with 5604 lower I/O module) ⁴
Expansion ¹	N/A	Up to 512 inputs	Up to 512 inputs	Up to 512 inputs	Up to 512 inputs
Digital Outputs:					
On-board	6 (selectable as input or output) ⁴	8 (selectable as input or output) ⁴	12 (when used with 5601 lower I/O module) or 32 selectable as input or output (when used with 5604 lower I/O module) ⁴	Standard: None	12 (when used with 5601 lower I/O module) or 32 selectable as input or output (when used with 5604 lower I/O module) ⁴
Expansion ¹	N/A	Up to 512 outputs	Up to 512 outputs	Up to 512 outputs	Up to 512 outputs
Frequency Inputs					
On-board	1, 0-5 kHz (turbine or dry contact)	1, 0-10 Hz (dry contact) 2, 0-10 kHz (turbine or dry contact)	3, 0-5 kHz ³	3, 0-5 kHz ³	3, 0-5 kHz ³
Expansion ¹	N/A	Up to 64 inputs	Up to 64 inputs	Up to 64 inputs	Up to 64 inputs
Turbine Inputs	1	2	None	None	None
Communication Ports	1, RS232 1, RS232/RS485	2, RS232 1, RS485	2, RS232 1, RS232/RS485	2, RS232 1, RS232/RS485 1, 10BaseT Ethernet	3, RS232 1, RS232/RS485 1, 10BaseT Ethernet
Radio Frequencies²	All SCADAPack controllers are available with spread spectrum radios at 900MHz and 2.4GHz (115.2 Kbps throughput)				
Serial Protocols	Modbus RTU, Modbus ASCII, DNP3				
Ethernet Protocols	N/A	N/A	N/A	Modbus TCP & Modbus RTU in UDP on SCADAPack32/32P	
Network Protocols	N/A	N/A	N/A	IP:ARP, TCP, TFTP, UDP and ICMP on SCADAPack32/32P	
12 / 24 VDC Converter	None	Yes	Yes (with 5604 I/O board)	Yes (with 5604 I/O board)	Yes (with 5604 I/O board)
AGA Gas Flow Runs	1	2	2	10	10
Data Logging Capacity	198,000 Words	198,000 Words	198,000 Words	465,000 Words	465,000 Words

¹ Using Series 5000 expansion modules.

² Frequencies not applicable in all countries.

³ Shared with Digital Inputs when used with 5604 lower I/O module.

⁴ Selectable as dry contact inputs or open sink outputs.