

New Product Bulletin

Introducing an exciting new innovation
from Control Microsystems

Wireless SCADAPack Series

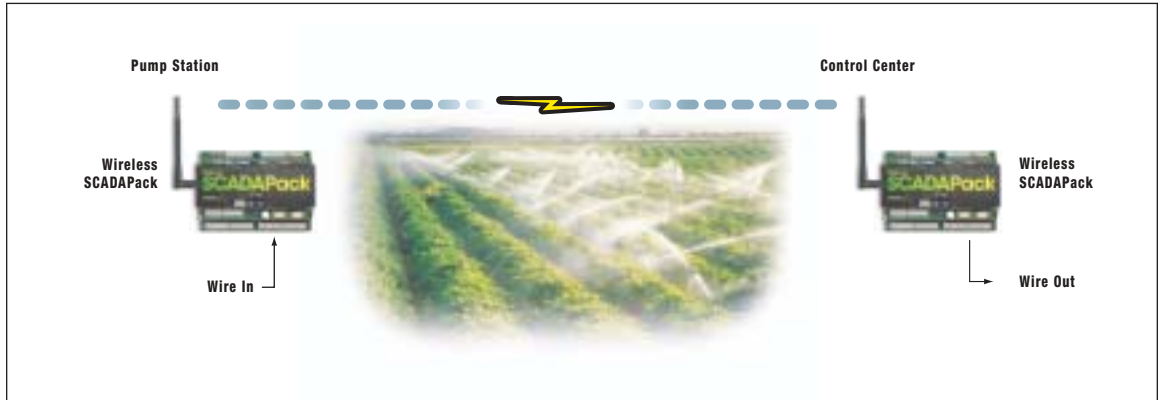


- **Long Range** – Up to 60 miles (96 km) clear line of sight (@900 MHz)
- **Hazardous Area Rated** – cULus Class 1 Division 2 area approved
- **License Free** – Frequency hopping spread spectrum
- **High Speed Radio** – 115.2 Kbps true data throughput
- **Rugged** – -40°F to 158°F (-40°C to +70°C)
- **Low Power Radio** – Sleep mode, 5 mA @ 12 Vdc
- **Error Free** – 32 bit CRC with automatic recovery; changes frequency 200 times/second

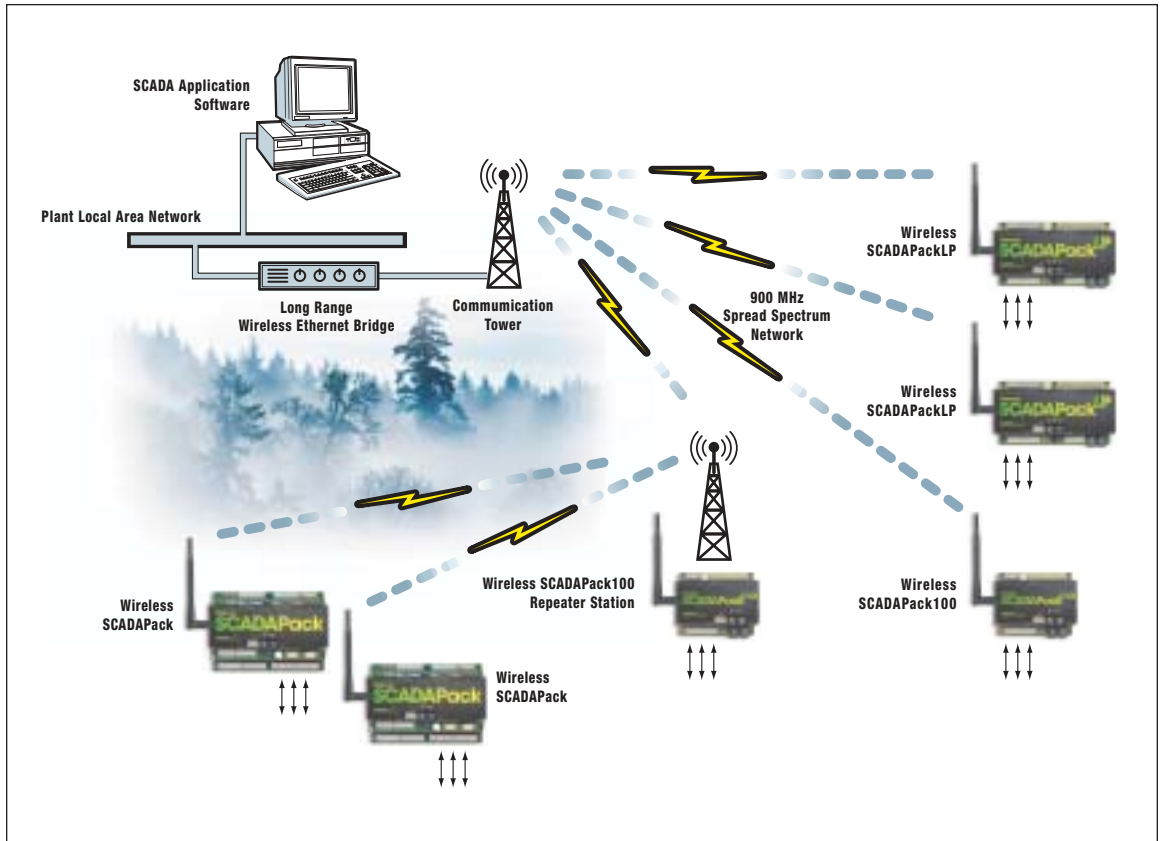
The industry leading SCADAPack PLC/RTU Series is now available with an integrated spread spectrum wireless transceiver. Simplified panel design eliminates the need for separate power supplies and cables, resulting in a more compact package as the radio fits neatly inside the controller. This affordable wireless solution eliminates the need for expensive licensing, higher start up costs or operational costs. Supports remote programming store-and-forward and report-by-exception. Customize your simple to sophisticated solution requirements in oil & gas, water/wastewater or electrical distribution with a variety of I/O configurations available. Wireless SCADAPacks are approved for installation in Class 1 Div. 2 cULus hazardous areas and environments. SCADAPack products feature a 3-year warranty. To discuss how Control Microsystems can help solve your telemetry, SCADA and remote monitoring challenges or your wireless application, please contact your local sales representative, call our toll free sales number (888)-267-2232 or visit our website: www.controlmicrosystems.com.

Model	Frequency*	Digital I/O	Analog I/O	Expandable
SCADAPack100	900 MHz/2.4 GHz	6	4	no
SCADAPack LP	900 MHz/2.4 GHz	8	6	yes
SCADAPack	900 MHz/2.4 GHz	32 using 5604 IO Board	8	yes
SCADAPack32	900 MHz/2.4 GHz	32 using 5604 IO Board	8	yes
SCADAPack32P	900 MHz/2.4 GHz	3 D/I/counters	0	yes

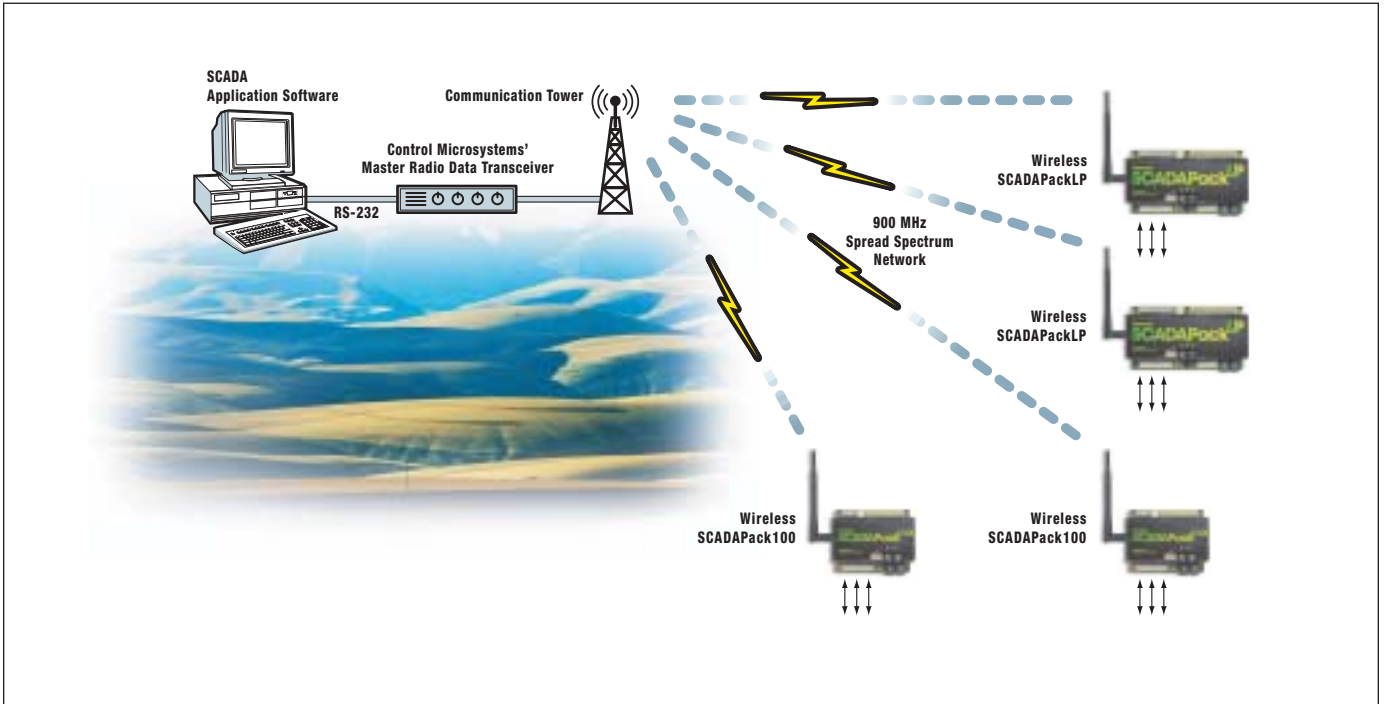
End-to-End Monitoring and Control Application



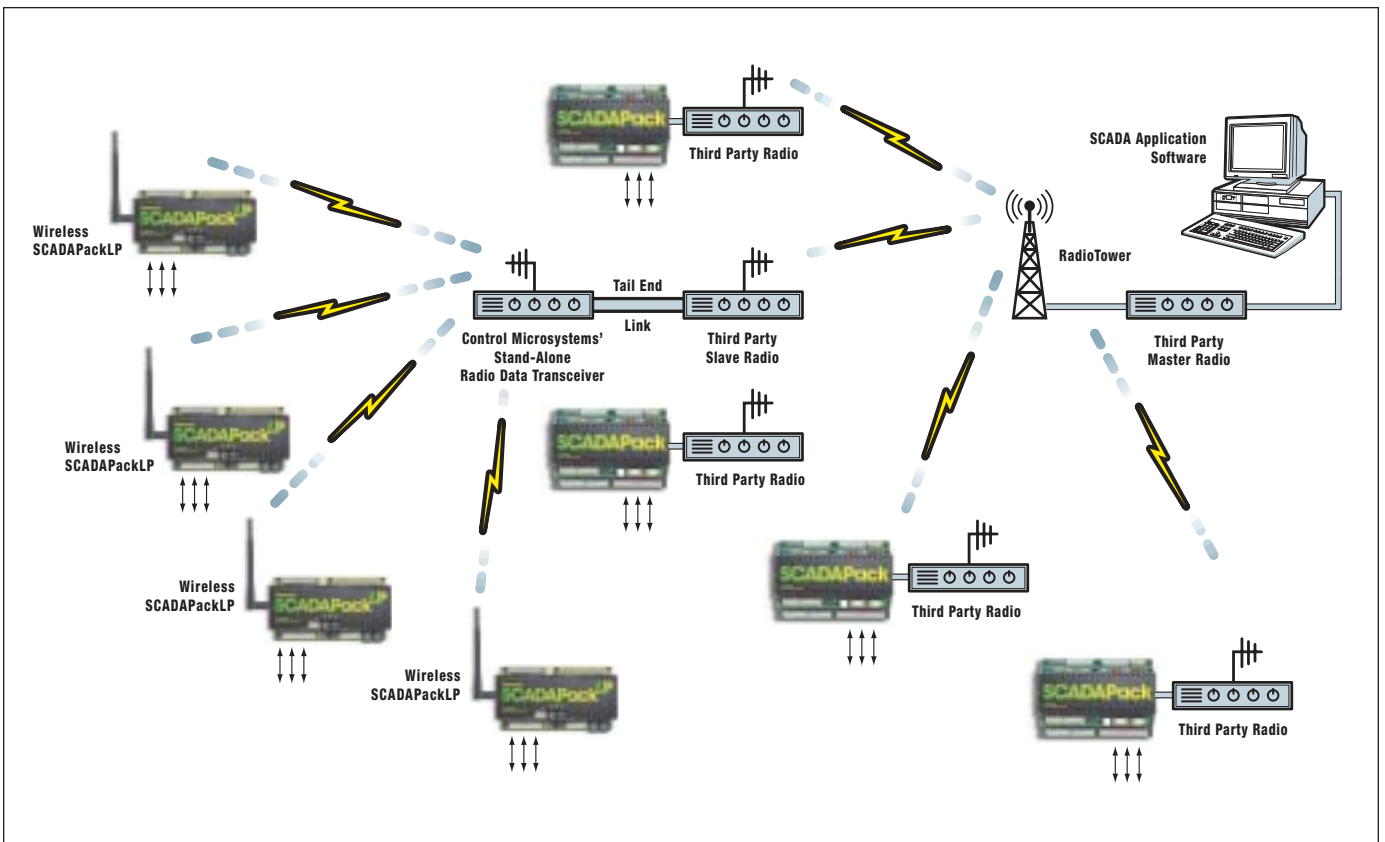
Typical Point-to-Multipoint SCADA Application with Repeater



Point-to-Multipoint SCADA Application



Expanding an Existing Point-to-Multipoint SCADA Application with Tail End Link



Radio Specifications

- **Noise Immunity** – superior performance in noise congested environments due to the rapid frequency changes
- **Secure** – proprietary spread spectrum technology prevents detection and unauthorized access

Radio link:

- Frequency Range 902-928 MHz/2.4 GHz
- Method Frequency hopping spread spectrum
- Hopping Patterns 15 per band, 105 total, user selectable
- Hopping Channels 50 to 112, user selectable
- Hopping bands 7, user selectable
- Range, Line-of-sight 60 miles
- Occupied Bandwidth 230 KHz
- Modulation GFSK
- RF Connector SMA female
- System Gain 140 dB

Transmitter:

- Output Power 100 mW to 1 Watt (+30 dBm) 900 MHz

Receiver:

- Sensitivity -108 dBm for 10⁻⁶ BER,
-110 dBm for 10⁻⁴ BER
- Selectivity 20 dB at fc ± 115 KHz, 60 dB at ± 145 KHz

Data Transmission:

- Error Detection 32 bit CRC, retransmit on error
- Data Encryption Substitution, dynamic key
- Link Throughput** 115.2 Kbps standard speed, 38.4 Kbps low speed

Data Interface:

- Protocol RS-232 1200 Baud to 115.2 KBaud, DCE

Diagnostics Interface:

- Connector 8-pin modular connector

Power Requirements: (Radio Portion Only)

Current [mA]	6 Vdc	12 Vdc	24 Vdc
Transmit:	1000	500	250
Receive:	110	75	30
Idle:	30	20	8
Sleep:	8	5	2.5

Environment and mechanical:

Operating temperature -40° C/-40° F to 70° C/158° F

* 2.4 GHz versions available April 2003.

** Uncompressed, measured assuming 75% frequency availability.

Wireless SCADAPacks feature built-in radio transceivers from  Technologies, Inc.
Radio Specifications provided by: www.freewave.com.

**CONTROL
MICROSYSTEMS.com**

Corporate Headquarters:

48 Steacie Drive, Ottawa, Ontario, Canada K2K 2A9 ■ Telephone: 1 613 591-1943 ■ Fax: 1 613 591-1022

Sales: (888) 267-2232

