

Model 18/18+

Spec Sheet



FEATURES

Model 18

- 8 discrete inputs (senses on/off)
- 8 control outputs

Model 18+

- 16 discrete inputs (senses on/off)
- 16 control outputs
- 4 analog inputs (0-5 VDC, 4-20 mA)
- 4 analog outputs (0-5 VDC)

APPLICATIONS

- Water System Monitoring and Control
- Water Tanks Monitor and Control
- Control and Monitor Remote Lift Stations
- Irrigation Monitoring and Control
- Monitor and Control Remote Sites for Temperature, Pressure, Flow, Power, Security
- Oil/Gas Refineries and Pipelines
- Food and Chemical Processing
- Industrial Wireless Process Control

REMOTE CONTROL & MONITORING

Say Goodbye to Leased Lines

Control Link is a wireless remote control and monitoring system consisting of two or more Model 18 or 18+ telemetry modules. When connected to conventional or trunking radios, Control Link can replace up to 20 dedicated or leased telephone lines for discrete on/off or analog monitoring and control.

Control Link provides a cost-effective wireless alternative for remote control and monitoring versus leased phone lines or dedicated wireline cable. Optional Models 1512 SentiDial and 1516 SentiVoice can provide voice alarms via phone or radio triggered from Control Link outputs.

Control Link can be configured as a point-to-point system or point-to-multi-point system. Each Control Link is bidirectional, capable of both sending and receiving data. All data transmissions are two-way and require a valid handshake response; if no handshake occurs, a communication failure alarm is generated.

OPERATION

A minimum Control Link system consists of two Model 18s connected to radios and powered by 12 VDC. Control Link #1 monitors inputs for changes and, upon detecting a change, transmits a data packet containing the input change information over the radio. The data packet is received by another radio connected to Control Link #2. Control Link #2 then reproduces the change at the corresponding output. These input and output changes

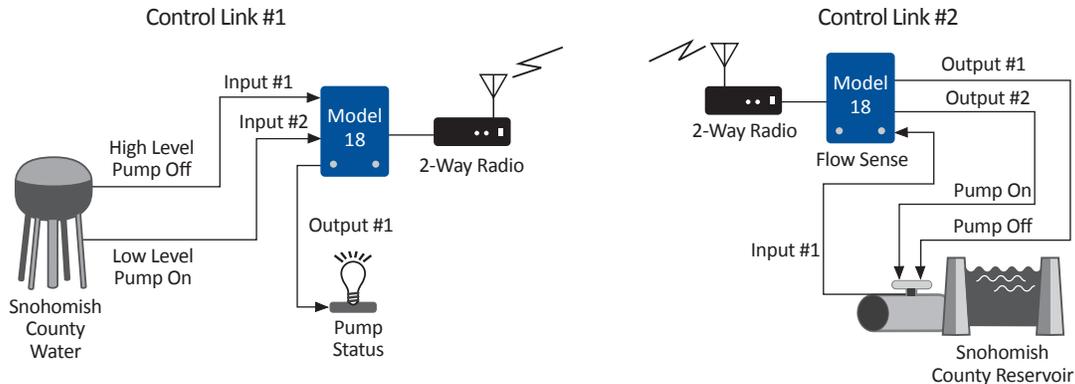
can be discrete on/off or, in the case of the Control Link Model 18+, analog values that are varying voltages (0-5V) or current (4-20mA). Transmission of analog signals allows remote monitoring of transducers connected to physical parameters like temperature, pressure, power, etc.

SYSTEM CONFIGURATIONS

Point-to-Point Configuration

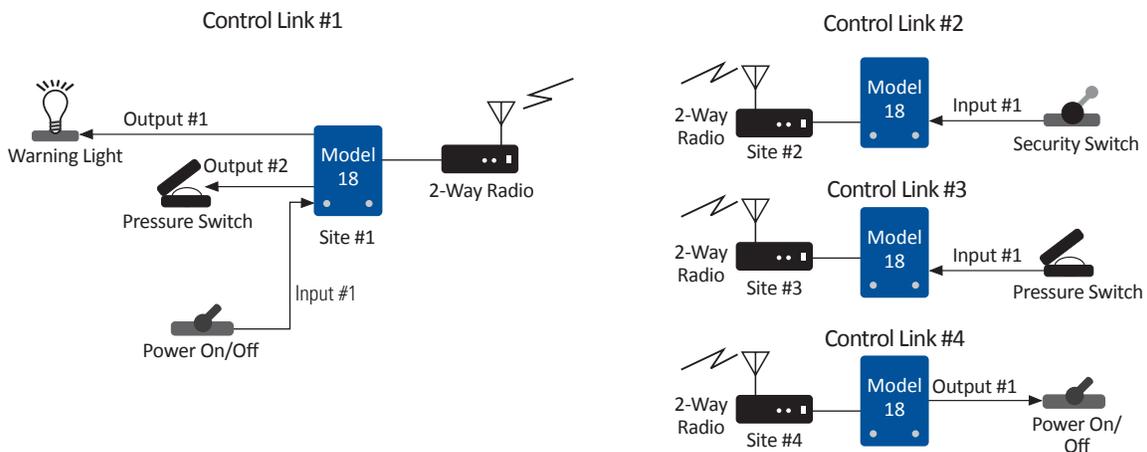
The user programs the units by mapping the inputs to the appropriate outputs.

- Control Link 1, Tank High Level, Input #1.....to.....Pump Off, Output #1, Control Link 2
- Control Link 1, Tank Low Level, Input #2.....to.....Pump On, Output #2, Control Link 2
- Control Link 1, Pump Status Light, Output #1.....to.....Pump Flow Sense, Input #1, Control Link 2



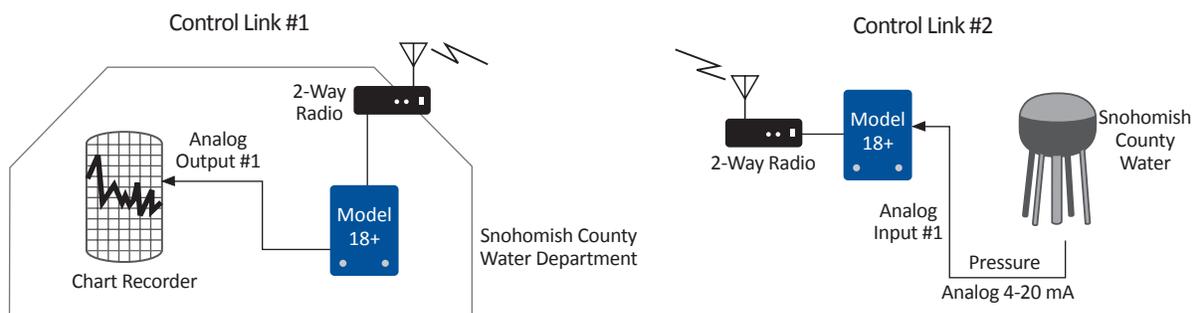
Point-to-Multipoint Configuration

- Control Link 1, Warning Light On, Output #1.....to.....Security Switch On, Input #1, Control Link 2
- Control Link 1, Pressure Switch Off, Output #2.....to.....Pressure Switch On, Input #1, Control Link 3
- Control Link 1, Power Off, Input #1.....to.....Power On, Output #1, Control Link 4



Analog Point-to-Point Configuration

- Control Link 1, Water Level Value, Output #1.....to.....Water Level Value, Input #1, Control Link 2



OPTIONS

Optional Industrial Backplane

Easily integrate the 18/18+ into a metal or plastic NEMA enclosure via the Industrial Panel Kit. This option includes NEMA standard mounting plate, radio mounting hardware, battery with charger circuit or power supply, expanded I/O, and relay mounting area.

SPECIFICATIONS

PHYSICAL

Power:	13.8VDC nominal, 10.5-16 VDC
Current:	75mA typical, 150mA max. @ 16V
Temperature:	0 to +60 degrees C
Size:	7.25"W x 10.5"D x 2.25"H
Weight:	2 lb

RADIO INTERFACE

Audio Output:	20mV to 2V P-P (mic level audio), 1K ohm
Audio Input:	100mV to 4V p-p, 50K ohm.
Channel Busy Input (COR):	Low - 0-.7VDC, <100 ohms. to ground High - 3.5 to 12 VDC, >10K ohms to ground
PTT Output (Push-to-Talk):	Relay to ground, 300 mA max, normally open or closed

Radio Modem Specifications

Data Rate	
Signaling:	1200 Baud Minimum shift keying

Signal Integrity

Required Signal Strength:	95% success at 12dB SINAD
---------------------------	---------------------------

RS-232 INTERFACE

Baud Rate:	4800
Parity:	None
Bits:	8
Stop Bits:	1

I/O SPECIFICATIONS

External Inputs

Contact Closure Inputs:	Model 18: 8 inputs Model 18+: 16 inputs Lo<.8 volts Hi>2 volts Protected to + 48 VDC
-------------------------	--

Analog Inputs:	Model 18+: 4 inputs 0 to 5 VDC analog sensor with 8-bit A/D input. 20mV/bit, 256 levels. Protected to + 48VDC
----------------	---

External Outputs

Open Collector Outputs:	Model 18: 8 outputs Model 18+: 16 outputs, can switch up to Vcc +1V @ 100mA
-------------------------	--

Analog Outputs:	Model 18+: 4 outputs 0 to 5VDC, 8-bit D/A, 20mV/bit, 256 levels
-----------------	---

ZETRON®

ZETRON AMERICAS

PO Box 97004, Redmond, WA USA 98073-9704

(P) +1 425 820 6363

(F) +1 425 820 7031

(E) zetron@zetron.com

ZETRON EMEA

27-29 Campbell Court, Bramley, Hampshire RG26 5EG, United Kingdom

(P) +44 1256 880663

(F) +44 1256 880491

(E) uk@zetron.com

ZETRON AUSTRALASIA

PO Box 3045, Stafford Mail Centre, Stafford QLD 4053, Australia

(P) +61 7 3856 4888

(F) +61 7 3356 6877

(E) au@zetron.com

©Zetron, Inc. All rights reserved. Zetron® and Zetron and Design® are registered trademarks of Zetron, Inc. All other trademarks are properties of their respective owners.

See Zetron price list for option pricing. Specifications subject to change without notice.

www.zetron.com

005-0462K May 2015