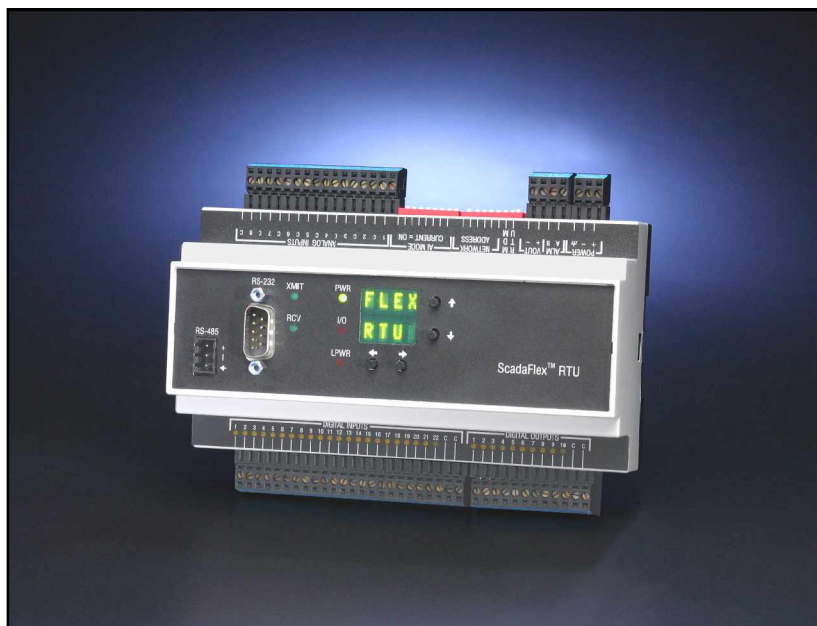




**PROCESS CONTROL**  
**REMOTE MONITORING**  
**HVAC CONTROL**  
**WATER & WASTEWATER**  
**OIL & GAS**

*A unique RTU with a built-in operator interface for local configuration, viewing analog levels, discrete and analog I/O forcing, and an optional internal spread spectrum radio.*



## ScadaFlex RTU

- **Industry Standard Modbus RTU**
- **Built-in Operator Interface**
- **Local I/O Forcing**
- **RS-232 & RS-422 Interfaces**
- **Serial Communications**
- **Pulse Totalization on all DIs**
- **Runtime Totalization on all DIs**
- **Analog Totalization on all AIs**
- **Optional Internal radio**
- **Very low power; ideal for solar**
- **Wide Temperature Range**
- **Built-in Analog/Discrete I/O**
  - 8 16-bit Analog Inputs
  - 2 12-bit Analog Outputs (6 opt)
  - 22 Discrete Inputs
  - 10 Discrete Outputs
- **Modular I/O Expansion**
- **3 Year Factory Warranty**

ScadaFlex™ is an “open architecture” Remote Terminal Unit (RTU) for SCADA, DCS, data collection and control applications. ScadaFlex™ RTUs are used for remote monitoring and control over wide-area radio and leased line networks as well as I/O expansion for ScadaFlex, EtherLogic and other PLCs. ScadaFlex™ RTUs can also be used as a rugged “Windows compatible” I/O system for PC computers.

### Modular Universal I/O

ScadaFlex™ RTUs are network addressable, enabling up to 255 of them to be connected together in a simple network using low-cost twisted pair wiring, or via radios, leased line or fiber optic modems.

### Easier System Support

ScadaFlex™ RTUs are “smart” with local signal processing. Their built-in operator interface supports local configuration and I/O forcing, making system installation and testing fast and

simple without laptop PCs, meters or simulators in the field.

### Industrial Strength

For long-term reliability, ScadaFlex™ RTUs have a wide operating temperature range, rugged transient and overload protection, and isolated field I/O and communication interfaces. A unique dual watchdog system further protects systems in the event of a field fault condition, host shutdown or network communications failure. All ScadaFlex™ RTUs carry a full 3-year factory warranty, one of the longest in the industry.

### Open Communications

As open architecture devices, ScadaFlex™ RTUs support the industry standard Modbus RTU communications protocol. This not only ensures interoperability with other instrumentation, it also provides compatibility with hundreds of popular SCADA/DCS software packages, PLCs and Process Controllers including ICL's **ScadaFlex Plus**, **EtherLogic** and **PC-in-a-Brick** Controllers.



**Industrial Control Links**

(800) 888-1893 [www.iclinks.com](http://www.iclinks.com)

# ScadaFlex RTU

## ANALOG INPUTS

<b>Quantity of Analog Inputs</b>	8
<b>Signal Input Levels, nominal</b>	0 or 4 to 20mA, 0 or 1 to 5V
<b>Resolution</b>	16 bits (1 part in 65, 535)
<b>Input Overvoltage Tolerance</b>	Input current limited to 50mA Input Voltage limiting starts at 6Vdc
<b>Overload / Transient Protection</b>	Transorb & Self Resetting Polyfuse
<b>Conversion Rate</b>	Approx. 2 samples/sec. per point
<b>Noise Rejection (50/60Hz)</b>	-120dB
<b>Wiring Terminations</b>	Removable Terminal Block
<b>Wire Size</b>	#14 to #26 stranded, #12 solid

## ANALOG OUTPUTS

<b>Quantity</b>	2 (6 optional)
<b>Output Type</b>	0 or 4 to 20mA
<b>Resolution</b>	12 bits (1 part in 4096),
<b>Wiring Terminations</b>	Removable Terminal Block
<b>Wire Size</b>	#14 to #26 stranded, #12 solid

## DISCRETE INPUTS

<b>Quantity</b>	22
<b>Input type</b>	Optically isolated with shared isolated common, AC or DC inputs
<b>ON/OFF Input levels</b>	9Vac/Vdc (min) / 6Vac/Vdc (max)
<b>Maximum input level</b>	50 Vac/Vdc
<b>DI Pulse Counting Rate</b>	
<b>DI #1 and #2</b>	up to 5 KHz
<b>DI #3 and #16</b>	up to 40Hz (50% Duty cycle)
<b>Wiring Terminations</b>	Removable Terminal Block
<b>Wire Size</b>	#14 to #26 stranded, #12 solid

## DISCRETE OUTPUTS

<b>Quantity</b>	10
<b>Output Voltage, nominal / max</b>	12/24 Vdc / 0 to 28 Vdc
<b>Output Type, Configuration</b>	Power FET, Sinking to Common
<b>Output Switch Current Rating</b>	.50A @20°C, derate to .25A @80°C
<b>Overvoltage / Transient Protection</b>	Transorb
<b>Overload Protection / Fault Current</b>	Self Resetting Polyfuse, 750mA

## COMMUNICATIONS

<b>Serial Ports</b>	1
<b>Serial Port Interfaces</b>	RS-232, 9 pin D Male RS-485, Removable Terminal Block, #14 to 26 stranded Com port also shared with internal radio option if installed
<b>Serial Port Data Rates</b>	2400 to 115K baud

## OPERATOR INTERFACE

<b>Display Technology, Configuration</b>	Alphanumeric LED, 2 lines x 4 char
<b>Keypad Configuration</b>	4 keys

## COMMUNICATIONS OPTIONS

<b>Internal Spread Spectrum Radios</b>	900MHz, 1W, up to 115Kbaud 2.4GHz, 0.5W, up to 115Kbaud
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## GENERAL SPECIFICATIONS

<b>Dimensions</b>	4.60" W x 6.15" L x 2.85" D
<b>Power (Input Voltage Range)</b>	10 to 28Vdc
<b>Temperature, operating</b>	-40°C to 75°C (-40°F to 167°F)
<b>Temperature, storage</b>	-40°C to 100°C (-40°F to 212°F)
<b>Isolation, Field to Logic</b>	2000 volts
<b>Isolation, Comm to Logic</b>	2000 volts
<b>Humidity</b>	5 to 85% RH, (non-condensing)
<b>Wiring Terminations</b>	Removable Terminal Blocks
<b>Wire Size</b>	#14 to #26 stranded, #12 solid

## SOFTWARE

<b>ScadaFlex RTU Toolbox</b>	Point and click configuration of the RTU operating parameters as well as display and control of the RTUs I/O, counters and totalizers. Also provides access to RTU calibration registers.
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## ORDER PART NUMBERS:

### HARDWARE

<b>25-0050</b>	ScadaFlex RTU, Standard I/O
<b>25-0051</b>	ScadaFlex RTU, Standard I/O, Internal 900MHz Spread Spectrum Radio
<b>25-0052</b>	ScadaFlex RTU, Standard I/O, Internal 2.4GHz Spread Spectrum Radio
<b>25-0060</b>	ScadaFlex RTU, Standard I/O + 4 AO
<b>25-0061</b>	ScadaFlex RTU, Standard I/O + 4 AO, Internal 900MHz Spread Spectrum Radio
<b>25-0062</b>	ScadaFlex RTU, Standard I/O + 4 AO, Internal 2.4GHz Spread Spectrum Radio
<b>25-0150</b>	ScadaFlex RTU, Operator Interface, Standard I/O
<b>25-0151</b>	ScadaFlex RTU, Operator Interface, Standard I/O, Internal 900MHz Spread Spectrum Radio
<b>25-0152</b>	ScadaFlex RTU, Operator Interface, Standard I/O, Internal 2.4GHz Spread Spectrum Radio
<b>25-0160</b>	ScadaFlex RTU, Operator Interface, Standard I/O + 4 AO
<b>25-0161</b>	ScadaFlex RTU, Operator Interface, Standard I/O + 4 AO, Internal 900MHz Spread Spectrum Radio
<b>25-0162</b>	ScadaFlex RTU, Operator Interface, Standard I/O + 4 AO, Internal 2.4GHz Spread Spectrum Radio

**SOFTWARE** (Starter kits include software and documentation on CDROM and PC-to-RTU data cable)

<b>91-1011</b>	<b>ScadaFlex RTU Starter Kit</b> RTU configuration and installation tools
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