The SCADALink RIO100 is a compact, low-power remote RTU designed for general serial communications to smart devices such as Electronic Flow Meters (EFM) and communicates industrial I/O signals such as 4-20mA signals and dry contact digital I/O.

The RIO100 provides RTU and I/O capabilities, fail-safe mode, and scheduled or periodic sleep mode for low-power operation.

It can be connected to existing licensed radio network, spread spectrum radio network and cellular or satellite network to provide wireless access to field data using Modbus RTU protocol.

I/O modules can be attached to the SCADALink RIO100 to provide I/O capabilities; and the SCADALink RIO100 can be configured to function as an emergency shutdown system.

**FEATURES**
- Modbus RTU protocol or transparent mode
- RS232/RS485 interface
- Interoperates with SCADALink I/O modules
- Class I Div 2
- 9 to 30 VDC input voltage
- Industrial temperature: -40 to 85 Deg C

**BENEFITS**
- Compact low power remote RTU
- Expandable analog and digital I/O capabilities via I/O expansion bus
- Programmable sleep mode for low power operation
- Approved for use in hazardous locations
- Easily configurable via Windows interface

**APPLICATIONS**
- Remote well monitoring
- Tank level monitoring
- EFM communications
### SPECIFICATIONS

**GENERAL**
- Operating Temperature: -40 to 85 Deg.C
- Mounting: 30.5 mm DIN rail
- Dimensions: 114.5mm (H) x 22.6mm (W) x 99 mm (L)

**ELECTRICAL**
- Input Voltage: 9 to 30VDC
- Peak Tx Current: 105 mA (@24VDC)
- Rx Current: 6mA (@24VDC)
- Sleep Current: 1.5mA (@24VDC)
- Power Modes:
  - Normal: Always on
  - Low Power: Programmable sleep period

**DATA COMMUNICATIONS**
- Data Rate: 1.2 - 115.2 Kbps
- Data Interface:
  - 1 RS232 (D99 male)
  - 1 RS232 / RS485 (4 Pin terminal)
  - 5 Pin bus connector

**CERTIFICATIONS**
- Radio: FCC, IC, ETSI
- Hazardous Location: Class I, Div 2 Group C, D T3C
  - suitable for use in Class 1 Zone 2, IIB, T3C

### APPLICATIONS
- RS232 and RS485 communications
- Communication to analog transmitters

### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>NAME</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>RIO100</td>
<td>Remote I/O RTU</td>
</tr>
<tr>
<td>RIO100-ESD</td>
<td>Remote I/O RTU with Emergency Shutdown</td>
</tr>
<tr>
<td>RIO900</td>
<td>Integrated Radio RTU</td>
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<tr>
<td>RIO900-ESD</td>
<td>Integrated Radio RTU with Emergency Shutdown</td>
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### ACCESSORIES

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<thead>
<tr>
<th>NAME</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>AI4</td>
<td>4 analog inputs (4-20mA)</td>
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<tr>
<td>AO4</td>
<td>4 analog outputs (4-20mA)</td>
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<tr>
<td>DIB</td>
<td>8 digital inputs</td>
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<tr>
<td>DO8</td>
<td>8 Digital outputs (relay)</td>
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<td>A8D4</td>
<td>4 analog / digital inputs</td>
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<tr>
<td></td>
<td>4 analog / digital / pulse inputs</td>
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<tr>
<td></td>
<td>4 digital outputs</td>
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<td>CAB-316-SMA</td>
<td>Jumper cable, SMA (M) to N (M), 3 ft., RG316</td>
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