• Industrial 1, 2, or 4 serial port, and 1 or 2 Ethernet port Modbus Gateways (Modbus RTU/ASCII <-> Modbus TCP)  
• Automatic read function “Agent Mode”  
• Ethernet ports each support up to 16 TCP devices, client or server  
• Serial ports each support up to 128 slave devices or 1 master device  
• DIP switch selectable termination resistor for RS-485 mode  
• High Serial Isolation Voltage - 2kV  
• UL61010 with Class 1 Div 2 HazLoc  
• Metal housing with wide temperature rating (-40 to +75 deg C)

### Ethernet Interface
- **Port Type**: Shielded RJ45  
- **Speed**: 10/100 Mbps  
- **Protection**: Built-in 1.5 kV magnetic isolation  
- **Protocol Supported**: Modbus TCP/IP Client and Server  
- **Modbus TCP Devices Supported**: 16 simultaneous Modbus TCP connections per Ethernet port  
- **Cable Type**: Autodetects Ethernet cable types (MDI/MDIX)  
- **Default IP address**: 192.168.0.249; 192.168.1.249 (2 port model)

### Serial Interface
- **Port**: D-sub 9-pin male port  
- **Interface Mode**: RS-232, RS-485 and RS-422  
- **Supported Baud Rates**: 300bps – 460.8 kbps  
- **Parity**: Odd, Even or None  
- **Data Bits**: 7 or 8 bits  
- **Stop Bits**: 1 or 2  
- **Flow Control**: RTS/CTS, XON/XOFF and None  
- **Termination**: DIP-Switch to Enable/Disable 120Ω matching resistor for RS-485  
- **ESD Protection**: 15kV for all signals  
- **Isolation Protection**: 2kV  
- **Serial Devices Supported**: 128 slaves or 1 master per port  
- **Protocols Supported**: Modbus RTU, Modbus ASCII

### Power Details
- **Power Consumption**: See Input Power in STRIDE Modbus Gateway Models table  
- **Power Input**: Redundant input terminals  
- **Input Voltage**: 12 / 24 / 48 VDC  
- **Appliance Class**: Class II, SELV power source  
- **Reverse Power Protection**: Yes  
- **Overload Protection**: Yes

### Environmental
- **Operating Temperature Range**: -40 to +75 °C [-40 to +167 °F]  
- **Storage Temperature Range**: -40 to +85 °C [-40 to +185 °F]  
- **Humidity**: 5 to 95% RH (non-condensing)  
- **Maximum Altitude**: 2000m  
- **Environmental Air**: For use in Pollution Degree 2 Environment  
- **Protection Level**: Metal case, IP40  
- **Agency Approvals**: UL61010-1, UL61010-2-201, Class I Div 2 12.12.01-2015; CSA C22.2 No. 213-16; CAN/CSA No. 61010-1-12; CAN/CSA-C22.2 No. 61010-2-2011; CE, FCC  
- **EMI**: EN 55032 Class A  
- **EMS**: IEC61000-4-2(EOS); ±6kV(contact),±8kV(air)  
- **MECHANICAL**: IEC 61000-4-3(RS): 10V/m (80MHz–2GHz)  
- **Mechanical Standards**: IEC61000-4-5(Surge); Power Port: ±1kV/DM, ±2kV/CM; Data Port: ±1kV  
- **IEC 61000-4-6 (CS)**: 10V(150KHz-80MHz)  
- **Agency Approvals**: UL61010-1, UL61010-2-201, Class I Div 2; 12; 12; 12015; CSA C22.2 No. 213-16; CAN/CSA No. 61010-1-12; CAN/CSA-C22.2 No. 61010-2-2011; CE, FCC

### Serial Port LED Status Indicators
- **PWR1 (green)**: LED ON indicates voltage applied to Power 1 terminals.  
- **PWR2 (green)**: LED ON indicates voltage applied to Power 2 terminals.  
- **RUN (green)**: LED ON indicates the gateway is booting.  
- **Link/Activity (green)**: LED ON indicates valid link is established.  
- **T, transmit (green)**: LED FLASHING indicates the gateway is sending data through serial port.  
- **R, receive (green)**: LED FLASHING indicates the gateway is receiving data through serial port

---

**Reset to Factory Defaults:**
Press recessed Hardware Reset button on top of gateway housing and hold for 5 seconds to reset all settings to factory default.

**NOTE:** For additional product details, a user manual, SGW-USER-M, is available as a downloadable PDF file from the Online Documentation area of the AutomationDirect website.
**Power Wiring:**

The switch can be powered from the same DC source that is used to power your other devices. To maintain the UL listing, this must be an SELV power supply. A DC voltage in the range of 12 to 48 VDC needs to be applied between the P1+ terminal and the P1- terminal as shown below. The chassis screw terminal should be tied to panel or chassis ground. To reduce down time resulting from power loss, the switch can be powered redundantly with a second power supply as shown below. A recommended DC power supply is AutomationDirect.com part number **PSL-24-010**.

Terminal block connector is Degson 2EDGK-5.08-04P-14-1000AH or equivalent.

**Communication Ports Wiring:**

**Ethernet Port**

<table>
<thead>
<tr>
<th>Pin</th>
<th>MDI-X Signal</th>
<th>MDI Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Receive Data + (RD+)</td>
<td>Transmit Data + (TD+)</td>
</tr>
<tr>
<td>2</td>
<td>Receive Data – (RD–)</td>
<td>Transmit Data – (TD–)</td>
</tr>
<tr>
<td>3</td>
<td>Transmit Data + (TD+)</td>
<td>Receive Data + (RD+)</td>
</tr>
<tr>
<td>4, 5, 7, 8</td>
<td>Unused</td>
<td>Unused</td>
</tr>
</tbody>
</table>

Note: + and – indicate level polarities.

**Serial Port**

<table>
<thead>
<tr>
<th>Pin</th>
<th>RS-232</th>
<th>RS-422/485–4w</th>
<th>RS-485–2w</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CTS</td>
<td>RXD – (B)</td>
<td>–</td>
</tr>
<tr>
<td>2</td>
<td>ROD</td>
<td>RXD + (A)</td>
<td>–</td>
</tr>
<tr>
<td>3</td>
<td>TXD</td>
<td>TXD + (Y)</td>
<td>Data – (B)</td>
</tr>
<tr>
<td>4</td>
<td>RTS</td>
<td>TXD – (Z)</td>
<td>Data + (A)</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td>6, 7, 8, 9</td>
<td>Unused</td>
<td>Unused</td>
<td>Unused</td>
</tr>
</tbody>
</table>

**Dimensions:**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Weight (kg)</th>
<th>Width (A)</th>
<th>Depth (B)</th>
<th>Height (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGW-MB1511-T</td>
<td>0.17 [0.36 lb]</td>
<td>30.0 [1.18”]</td>
<td>68.0 [2.68”]</td>
<td>115.0 [4.53”]</td>
</tr>
<tr>
<td>SGW-MB1512-T</td>
<td>0.17 [0.37 lb]</td>
<td>54.0 [2.13”]</td>
<td>106 [4.17”]</td>
<td>135.0 [5.32”]</td>
</tr>
<tr>
<td>SGW-MB1524-T</td>
<td>0.32 [0.71 lb]</td>
<td>30.0 [1.18”]</td>
<td>68.0 [2.68”]</td>
<td>115.0 [4.53”]</td>
</tr>
</tbody>
</table>

**Additional Help and Support**

- Please refer to the STRIDE Modbus Gateway User Manual for more detailed information.
- For additional technical support and questions, call our Technical Support team @ 770-844-4200.