Table of Contents

Power Supplies ............................................................................................... 3
Communication Cables ................................................................................... 4
Accessory Options .......................................................................................... 5, 6
Appendix A | Communication Cable / Power Supply Configurations ............ 7, 8, 9, 10
## Power Supplies

### 100-T8D
The 100-T8D is a 2-lead, 24 VDC power supply with a 15-pin D-connector, 0.75 amp, 110-230 VAC, CE approved (see Figure 1 in Appendix A for basic configuration). This power supply/connector combination is the simplest option to power your meter or controller, compatible with low flow 100 Series controllers and all size 100 Series meters (see Power Supply Compatibility chart below). Use the provided display software to read the flow or provide a flow signal. This accessory provides power only. When ordering, specify your plug preference in parentheses: (US), (UK), (EU).

If additional wires are needed for analog or digital input/output signals, a full cable and bare fly lead power supply (100-T8F) to attach to the cable are required. See full cables such as the 100-Analog Cable and order with the 100-T8F power supply.

Note: The 100-T10D is a 2-lead, 24 VDC power supply with a 15-pin D-connector with a larger capacity, 1.25 amp, 110-230 VAC power supply, compatible with medium and high flow 100 Series controllers only, CE approved.

See Figures 1, 3, 4, 6, and 7 in Appendix A for configuration diagrams.

### 100-T8F
The 100-T8F is a 24 VDC power supply with two bare fly leads and no connector, 0.75 amp, 110-230 VAC, CE approved. This power supply is compatible with low flow 100 Series controllers and all size meters (see Power Supply Compatibility chart below). The two bare fly leads need to be soldered to the two appropriate wires of one of the communication cables below such as the 100-Analog Cable (see Figure 2 in Appendix A). When ordering, specify your plug preference in parentheses: (US), (UK), (EU).

Note: The 100-T10F is a 24 VDC power supply with two bare fly leads and no connector with a larger capacity, 1.25 amps, 110-230 VAC power supply compatible with medium and high flow 100 series controllers, CE approved.

See Figures 2 and 5 in Appendix A for configuration diagrams.

### Power Supply Compatibility

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Max Output</th>
<th>Meter and Controller Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-T8 (D or F)</td>
<td>24 VDC at 750 mA</td>
<td>All meters (M100 and M101) Low flow controllers (C100L and C101)</td>
</tr>
<tr>
<td>100-T10 (D or F)</td>
<td>24 VDC at 1.25 amp</td>
<td>Medium and high flow controllers (C100M, C100H, and C140)</td>
</tr>
</tbody>
</table>
Communication Cables

100-Analog Cable

**Model Codes | C1, C3, C10, C25, C(x)**

This cable is a 15-conductor “do everything” cable with fly leads. You can order the standard 1-foot, 3-foot, 10-foot, 25-foot or custom-length cable by specifying 100-Analog Cable C(x) where x is the length in feet. The fly leads on this cable allow you to create your own connection to your power supply, analog or digital output, control signals (controllers only), and your PLC. Consult your wiring diagram in the Instruction Manual or Installation Guide and use the wires you need or see Wiring Definition for Optional Communication Cable (pinout) chart on page 5. Isolate and insulate any unused wires.

See Figures 2, and 5 in Appendix A for configuration diagrams.

100-Analog Cable  [purchase online](#)

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100-RS232 Digital Cable

**Model Code | 100-CRN**

A 100-RS232 Digital Cable provides a simple RS-232, 3-wire connection to your computer. One end of this 6-foot cable plugs into the side of the SmartTrak® 100, 101, and 140 device at the “RJ45” connector (Caution: this looks like an Ethernet connection but cannot be used as such), and the other end plugs into your computer’s 9-pin serial port. If you do not have this port on your computer, and many new computers do not, you will need to convert to USB using an easily-available serial/USB adaptor such as Sierra’s 100-SerialUSB on page 5. Since this cable does not connect to a power supply, your unit must still be powered using the 15-pin connection and a 24 VDC supply. See power supplies on page 3.

Note: The RJ45 connector on the side of the SmartTrak 100, 101, and 140 can also be used for an optional Remote Pilot Module which eliminates the use of this 100-RS232 Digital Cable (see Figure 3 in Appendix A).

See Figures 4 and 5 in Appendix A for configuration diagrams.

100-RS232 Digital Cable  [purchase online](#)
Accessory Options

Serial to USB
Model Code | 100-SerialUSB
The 100-SerialUSB is a USB to serial converter. When connecting the 100-RS232 Digital Cable to a computer, it must have a standard 9-pin serial port. If the computer does not have a 9-pin serial port, you will need to convert to USB using an adaptor such as this 100-SerialUSB.

See Figures 4, and 5 in Appendix A for configuration diagrams.

15-pin Connector D-kit
Model Code | 100-C0
This connector set includes a 15-pin connector if you prefer to construct your own cable for power and/or signals going in or out of your device. If ordering after sale, this is called a 100-15pin D-kit (100-C0). If ordering with a flow meter or controller, C0 will appear at the end of the model number.

<table>
<thead>
<tr>
<th>Pin #</th>
<th>Wire color in cable</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Brown</td>
<td>ground/output</td>
</tr>
<tr>
<td>2.</td>
<td>Red</td>
<td>0-5 VDC output (or 0-10, 1-5 VCD</td>
</tr>
<tr>
<td>3.</td>
<td>Orange</td>
<td>Analog ground/RS-232</td>
</tr>
<tr>
<td>4.</td>
<td>Pink</td>
<td>Valve override purge</td>
</tr>
<tr>
<td>5.</td>
<td>Yellow</td>
<td>Power return (-)</td>
</tr>
<tr>
<td>6.</td>
<td>Green</td>
<td>Power input (+)</td>
</tr>
<tr>
<td>7.</td>
<td>Green/White</td>
<td>RS-232 transmit (out)</td>
</tr>
<tr>
<td>8.</td>
<td>Blue</td>
<td>Setpoint</td>
</tr>
<tr>
<td>9.</td>
<td>Purple</td>
<td>Not used</td>
</tr>
<tr>
<td>10.</td>
<td>Gray</td>
<td>Analog ground/setpoint</td>
</tr>
<tr>
<td>11.</td>
<td>White</td>
<td>Reference voltage</td>
</tr>
<tr>
<td>12.</td>
<td>Black</td>
<td>Valve override close</td>
</tr>
<tr>
<td>14.</td>
<td>Red/White</td>
<td>4-20 mA output</td>
</tr>
<tr>
<td>15.</td>
<td>Red/Black</td>
<td>Not used</td>
</tr>
<tr>
<td></td>
<td>Shield Wire (no insulation)</td>
<td>Chassis (earth) ground</td>
</tr>
</tbody>
</table>
**Remote Pilot Module**

**Model Code | 100-RDO**

This remote display/touchpad “Pilot Module” connects to the RJ45 socket and allows the user to control and read from a 10-foot distance. This module can also be panel mounted (panel mount bracket and rear connections shown at right).

See Figure 3 in Appendix A for configuration diagram.

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**Compod Modbus Communication Module**

**Model Codes | 100-CMNR, 100-CMDD**

The 100-CMNR is a Compod with RS-485 MODBUS communication mounted on the enclosure. The 100-CMDD is the Compod with RS-485 MODBUS communication and display mounted on the enclosure. If your meter or controller was ordered with a “Compod” module for Modbus RTU, you will need one or more additional cables:

**100-COMPOD COMPUTER CABLE**  
Model Code | 100-CRC

The Compod Computer Cable is a 10-foot compod cable that connects your mounted Compod (9-pin) to your computer via the included RS-485/USB converter.

See Figures 6 and 7 in Appendix A for configuration diagrams.

**100-COMPOD DAISY CHAIN CABLE**  
Model Code | 100-DCC

The Compod Daisy Chain Cable is a 10-foot cable that runs from one 9-pin Compod connector to the next. This cable has no power, just RS-232 Tx, Rx, and shield/ground. You will still need a separate power supply with a 15-pin connection and 24 VDC power for each device. See power supplies above.

See Figure 7 in Appendix A for configuration diagram.
Appendix A | Communication Cable / Power Supply Configurations

Figure 1 | 100-T8D Power Supply

Figure 2 | 100-Analog Cable/100-T8F Power Supply

Note: It is best to verify + and - power supply wires with a voltmeter.
Figure 3 | Remote Pilot Module/100-T10D Power Supply

Figure 4 | 100-RS232 Digital Cable/Serial to USB/100-T10 Power Supply
Figure 5 | 100-Analog Cable/100-RS232 Digital Cable/Serial to USB/100-T10F Power Supply

Figure 6 | Compod Computer Cable/100-T8D Power Supply

Serial to USB
100-SerialUSB

100-RS232 Digital Cable
100-CRN

100-Analog Cable
C1, C3, C10, C25, C(x)

100-T10F

To Computer

Yellow Power Return (-)
Green Power Input (+)

100-Compod Computer Cable
Model Codes | 100-CRC

100-T8D

Side View
**Figure 7 | Compod Computer Cable/100-Compod Daisy Chain Cable/100-T8D Power Supply**

1. **100-Compod Computer Cable**
   - Model Codes | 100-CRC
   - To Computer

2. **100-Compod Daisy Chain Cable**
   - Model Codes | 100-DCC

3. **100-T8D**

For further assistance contact our Technical Support Department at 1-800-866-0200 or go to http://www.sierrainstruments.com/techsupport/techsupport.html