Warranty and Assistance

The HUB-SDM8 is warranted by CAMPBELL SCIENTIFIC, INC. to be free from defects in materials and workmanship under normal use and service for twelve (12) months from date of shipment unless specified otherwise. Batteries have no warranty. CAMPBELL SCIENTIFIC, INC.’s obligation under this warranty is limited to repairing or replacing (at CAMPBELL SCIENTIFIC, INC.’s option) defective products. The customer shall assume all costs of removing, reinstalling, and shipping defective products to CAMPBELL SCIENTIFIC, INC. CAMPBELL SCIENTIFIC, INC. will return such products by surface carrier prepaid. This warranty shall not apply to any CAMPBELL SCIENTIFIC, INC. products which have been subjected to modification, misuse, neglect, accidents of nature, or shipping damage. This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability or fitness for a particular purpose. CAMPBELL SCIENTIFIC, INC. is not liable for special, indirect, incidental, or consequential damages.

Products may not be returned without prior authorization. The following contact information is for US and International customers residing in countries served by Campbell Scientific, Inc. directly. Affiliate companies handle repairs for customers within their territories. Please visit www.campbellsci.com to determine which Campbell Scientific company serves your country. To obtain a Returned Materials Authorization (RMA), contact CAMPBELL SCIENTIFIC, INC., phone (435) 753-2342. After an applications engineer determines the nature of the problem, an RMA number will be issued. Please write this number clearly on the outside of the shipping container. CAMPBELL SCIENTIFIC's shipping address is:

CAMPBELL SCIENTIFIC, INC.
RMA#___
815 West 1800 North
Logan, Utah 84321-1784

CAMPBELL SCIENTIFIC, INC. does not accept collect calls.
HUB-SDM8 Table of Contents

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1. Introduction

The HUB-SDM8 is an 8-channel hub for SDM peripherals and power connectors, and is used to daisy-chain multiple sets of SDM (Synchronous Device for Measurement) devices to a single Campbell Scientific, Inc. datalogger, as well as run multiple power connectors using a 16 AWG wire. The HUB-SDM8 is comprised of an environmental enclosure with eight compression fittings (two larger for 16 AWG power wires) and eight terminal strips. The HUB-SDM8 can also be used as a generic junction box, or as a HUB-SDM5.

2. HUB-SDM8 Specifications

Terminal Strips:

Three spring-loaded “guillotine” connections per terminal; two terminals in common through a jumper creates eight banks

Operating Temperature:

-55°C to +85°C

Operating Humidity:

Noncondensing 0% – 95%

Dimensions:

<table>
<thead>
<tr>
<th>Length</th>
<th>17.8 cm (7.0”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>19.7 cm (7.75”)</td>
</tr>
<tr>
<td>Depth</td>
<td>13.3 cm (5.25”)</td>
</tr>
</tbody>
</table>

Weight:

0.88 kg (1.95 lbs)

3. General

Inside the HUB-SDM8 enclosure are eight pairs of spring-loaded "guillotine" terminal strips, which provide connection points for individual wires. A small screwdriver is included to open the guillotines for wire entry. These terminal strips are mounted on a DIN-rail and an orange end cap separates each pair. Each pair of terminal strips is connected to each other by means of a jumper, and is used to connect up to six wires to each other.
4. Installation and Wiring

A U-bolt is used to mount the HUB-SDM8 to a 1.25 inch NPT pipe.

The spring-loaded guillotines are opened with a small flat blade (2.5 x 50 mm) screwdriver (p/n 8125). Orient the screwdriver blade so that the blade edge is perpendicular to the orange separators. Gently insert the small flat blade screwdriver into the square slot located next to the circular wire port until it bottoms out. For the cluster of four wire ports located on the left hand side of the HUB-SDM8, the guillotine release slot is located to the right of the wire port. For the wire ports on the right hand side of the HUB-SDM8, the guillotine release slot is located to the left of the wire port. Once the screwdriver has been completely inserted and has bottomed out, firmly press the screwdriver down until the guillotine snaps open. Insert and hold the wire as the screwdriver is removed.

4.1 Wiring SDM Devices and Power Wires for Daisy-Chain

Before connecting the cable to the terminals, strip the wire insulation back to expose 1/4 inch of bare wire. Feed the cable through the bulkhead fitting. Neatly separate the wires, and connect them, using the technique described in section 4 above. The figures below show how two SDM devices (CSAT3 and LI-7500) and their power wires are connected within a daisy-chain network.
5. **HUB-SDM5**

The HUB-SDM8 can provide the same function as the HUB-SDM5, which is a 5-channel hub for SDM peripherals. Use the supplied plugs to seal the unused bulkhead fittings to use the HUB-SDM8 to connect multiple SDM devices to a single Campbell Scientific, Inc. datalogger. Please refer to the HUB-SDM5 manual for connecting multiple SDM devices to a datalogger, using the HUB-SDM8.

6. **Generic Junction Box**

The HUB-SDM8 can be used as a generic junction box. In its default configuration, six eight-conductor cables can be connected to each other. Three sixteen-conductor cables can be connected to each other by removing the jumper between the terminal strips. Use a small screwdriver to pry the jumper out.
7. **Maintenance**

There are no user-serviceable parts in the HUB-SDM8. Make sure that all unused bulkhead fittings are sealed with a plug and that the lid is tightly fastened.
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