Vaisala Duct Mount Humidity/Temperature Transmitter Connection Instructions
for use with HOBO® H22 and U30 Series Data Loggers

Applies to this Vaisala Humidity/Temperature Transmitter:

<table>
<thead>
<tr>
<th>Onset Part No.</th>
<th>Outputs Vaisala Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-VAI-HMD-40Y</td>
<td>4-20mA representing 0 to 100% Relative Humidity</td>
</tr>
<tr>
<td></td>
<td>4-20mA representing -10 to +60°C (+14 to +140°F)</td>
</tr>
<tr>
<td></td>
<td>HMD-40Y</td>
</tr>
</tbody>
</table>

This document provides instructions on connecting the Vaisala Humidity/Temperature Transmitter listed above to the FlexSmart™ Analog Module used with HOBO H22 series data loggers or to the Analog Sensor Port option used with HOBO U30 series loggers. It also lists configuration values used by HOBOware® Pro software to configure the logger for the transmitter. Note: For information on installing the humidity/temperature transmitter, and other transmitter details, refer to the documentation provided by Vaisala.

**Required:**
- Vaisala Humidity/Temperature Transmitter listed above
- HOBO H22 or U30 Series Data Logger
- FlexSmart Analog Module, Onset Part No: S-FS-CVIA (for H22 series) or Analog Sensor Port option (for U30 series)
- HOBOware Pro Software, version 2.2.1 or higher (2.4.0 or higher for U30 series)
- For Two-Channel Configuration (temperature and RH, as shown below): Customer-supplied length of 18 AWG Shielded, Two Twisted Pairs Cable (Belden 1048A or equivalent recommended)
- For Single-Channel Configuration (temperature or RH): Customer-supplied length of 18 AWG Shielded, Twisted Pair Cable (Belden 1120A or equivalent recommended)

**Connecting the Humidity/Temperature Transmitter to the Analog Module or Port:**

**HOBO H22 or U30 Series Data Logger**

**S-FS-CVIA FlexSmart Analog Module**

**T-VAI-HMD-40Y Humidity/Temperature Transmitter**

Customer-supplied 18 AWG shielded, twisted pair cable:
- Belden 1048A or equivalent recommended for two-channel configuration.
- Belden 1120A or equivalent recommended for single-channel configuration.

**Configuring the Data Logger for the Humidity/Temperature Transmitter, using HOBOware Pro Software:**

**Note:** HOBOware Pro software provides a configuration file for the transmitter. The tables below list the recommended configuration values for the transmitter that this file contains. For information on loading configuration files, refer to the software documentation.

<table>
<thead>
<tr>
<th>Channel 1</th>
<th>Warm-Up*</th>
<th>Measurement Type</th>
<th>Raw Value 1</th>
<th>Raw Value 2</th>
<th>Raw Units</th>
<th>Scaled Value 1</th>
<th>Scaled Value 2</th>
<th>Scaled Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>0.03 sec</td>
<td>Current</td>
<td>4</td>
<td>20</td>
<td>mA</td>
<td>-40</td>
<td>-40</td>
<td>C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Channel 2</th>
<th>Warm-Up*</th>
<th>Measurement Type</th>
<th>Raw Value 1</th>
<th>Raw Value 2</th>
<th>Raw Units</th>
<th>Scaled Value 1</th>
<th>Scaled Value 2</th>
<th>Scaled Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RH</td>
<td>0.03 sec</td>
<td>Current</td>
<td>4</td>
<td>20</td>
<td>mA</td>
<td>0</td>
<td>100</td>
<td>%</td>
</tr>
</tbody>
</table>

*Warm-up excitation power provided by the FlexSmart Analog Module and H22 (or Analog Sensor Port and U30).
Service and Support

HOBO products are easy to use and reliable. In the unlikely event that you have a problem with this instrument, contact the company where you bought the logger: Onset or an Onset Authorized Dealer. Before calling, you can evaluate and often solve the problem if you write down the events that led to the problem (are you doing anything differently?) and if you visit the Technical Support section of the Onset web site at www.onsetcomp.com/support.html. When contacting Onset, ask for technical support and be prepared to provide the product number and serial number for the logger and software version in question. Also completely describe the problem or question. The more information you provide, the faster and more accurately we will be able to respond.

Onset Computer Corporation
470 MacArthur Blvd., Bourne, MA 02532
Mailing: PO Box 3450, Pocasset, MA 02559-3450
Phone: 1-800-LOGGERS (1-800-564-4377) or 508-759-9500
Fax: 508-759-9100
E-mail: loggerhelp@onsetcomp.com
Internet: www.onsetcomp.com

Warranty

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Returns

Please direct all warranty claims and repair requests to place of purchase.

Before returning a failed unit directly to Onset, you must obtain a Return Merchandise Authorization (RMA) number from Onset. You must provide proof that you purchased the Onset product(s) directly from Onset (purchase order number or Onset invoice number). Onset will issue an RMA number that is valid for 30 days. You must ship the product(s), properly packaged against further damage, to Onset (at your expense) with the RMA number marked clearly on the outside of the package. Onset is not responsible for any package that is returned without a valid RMA number or for the loss of the package by any shipping company. Loggers must be clean before they are sent back to Onset or they may be returned to you.

Repair Policy

Products that are returned after the warranty period or are damaged by the customer as specified in the warranty provisions can be returned to Onset with a valid RMA number for evaluation.