Veris Differential Pressure Transducer Connection Instructions
For use with HOBO® H22, U12, U30, UX120-006M, and RX3000 data loggers and HOBO ZW data nodes

Applies to these Veris Differential Pressure Transducers:

<table>
<thead>
<tr>
<th>Onset Part No.</th>
<th>Air Pressure Range</th>
<th>Output</th>
<th>Veris Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-VER-PXU-L</td>
<td>0-10” WC</td>
<td>4-20mA (or 0-5V/0-10V) representing 0 to 10” WC</td>
<td>PXULX05S (LCD display)</td>
</tr>
<tr>
<td>T-VER-PXU-X</td>
<td>0-10” WC</td>
<td>4-20mA (or 0-5V/0-10V) representing 0 to 10” WC</td>
<td>PXUXX05S (no display)</td>
</tr>
</tbody>
</table>

This document provides instructions on connecting the Veris Differential Pressure Transducers listed above to each of the following:

- FlexSmart™ Analog Module used with HOBO H22 series data loggers
- Analog Sensor Port/Module used with HOBO U30 and RX3000 series data loggers
- Voltage adapter used with the U12 and UX120-006M data loggers and ZW series data nodes

It also lists configuration values used by HOBOware® software to configure the logger for each transducer. **Note:** For information on connecting the differential pressure transducer to the pressure source, and other transducer details, refer to the documentation provided by Veris.

**Required**

- Selected Veris Differential Pressure Transducer
- HOBO H22, U12, U30, UX120-006M, or RX3000 data logger, or HOBO ZW data node
- FlexSmart Analog Module, Onset Part No: S-FS-CVIA (for H22 series); Analog Sensor Port/Module option (for U30 and RX3000 series); voltage adapter, Onset Part No. CABLE-ADAP5 or CABLE-ADAP10 (for U12, UX120-006M, or ZW series)
- HOBOware software, version 2.2.1 or higher (2.4.0 or higher for U30 series; 3.6 or higher for UX120-006M); HOBOware Pro 3.0 or higher for ZW series
- HOBOlink (for RX3000 series data loggers)
- Customer-supplied length of 18 AWG, shielded, multi-conductor cable

**Connecting the Differential Pressure Transducer to the Analog Module or Port**

H22 Connection

Veris Differential Pressure Transducer
(Onset Part No. T-VER-PXU-L shown)
**Veris Differential Pressure Transducer Connection Instructions**

### U30 or RX3000 Connection (U30 Shown)

**HOBO U30 Series Data Logger**
- **Analog Sensor Port**
  - **Shield**
  - **Ch1 Signal**
  - **Ch1 Return**
  - **Exc Out**

**Differential Pressure Transducer**
- **Analog Sensor Port**
  - **Shield**
  - **Ch2 Signal**
  - **Ch2 Return**
  - **Ext Return**

**Conductor**
- **POWER/4-20mA OUT (0-10V)**
- **COM**
- **ZERO**
- **N/C**

**Customer-supplied 18 AWG shielded multi-conductor cable**

### ZW, U12, and UX120-006M Connection

**HOBO ZW Series Wireless Data Node; U12 or UX120-006M Logger**
- **Connect to analog port**

**Differential Pressure Transducer**
- **AC-SENS-1**

**CABLE-4-20MA (for 4-20mA output) or CABLE-ADAP5 (for 0-5VDC output) or CABLE-ADAP10 (for 0-10VDC output)**

**Terminal Block inside transducer housing**
- **(+)**
- **(-)**
- **N/C**
- **Use appropriate termination for connection (denoted with )**

**CAUTION:** Polarity is very important! **Before** plugging AC-SENS-1 into AC power, **make sure the correct polarity lead connections to device are made as shown!**

**Page 2 of 3**
**Veris Differential Pressure Transducer Connection Instructions**

**Configuring the Data Logger for the Differential Pressure Transducer using HOBOware Software**

HOBOware software provides configuration files for the transducers. The table below lists the recommended configuration values that these files contain. For information on loading configuration files, refer to the software documentation.

<table>
<thead>
<tr>
<th>Onset Part Nos.</th>
<th>Channel Name</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>T-VER-PXU-L and T-VER-PXU-X</td>
<td>Diff Pressure</td>
<td>20 sec</td>
<td>Current</td>
<td>4</td>
<td>20</td>
<td>mA</td>
<td>0</td>
<td>0.1 (or 0.25, 0.5, 1, 2.5, 5, or 10)</td>
<td>in WC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Voltage</td>
<td>0</td>
<td>5 (or 10)</td>
<td>V</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

- Excitation power provided by the FlexSmart Analog Module (Onset Part No. S-FS-CVIA) with H22; by the Analog Sensor Port/Module with U30 and RX3000; and by power adapter (Onset Part No. AC-SENS-1) with ZW, U12, or UX120-006M.
- Both differential pressure transducer models have switch-selectable ranges and scales, as listed.