Ion Science VOC Monitor Connection Instructions

For use with HOBO® H22, U30, U12, UX120-006M, and RX3000 data loggers and HOBO ZW data nodes

Applies to this Ion Science VOC Monitor:

Onset Part No.	Output	Ion Science Part No.
T-ION-TVOC	4-20mA representing 0 to 10/100/1000 ppm	TVOC

WARNING! All Onset devices listed in this document are **NOT** intrinsically safe and should **NOT** be used in hazardous areas!

This document provides instructions on connecting the Ion Science VOC Monitor listed above to each of the following:

- FlexSmart™ Analog Module used with HOBO H22 series data loggers
- Analog Sensor Port/Module option used with HOBO U30 and RX3000 series loggers.
- 4-20mA cable used with the HOBO U12 and UX120-006M data loggers and HOBO ZW data nodes

It also lists configuration values used by HOBOware® software to configure the logger for the monitor.
Note: For VOC monitor details, refer to the documentation provided by Ion Science.

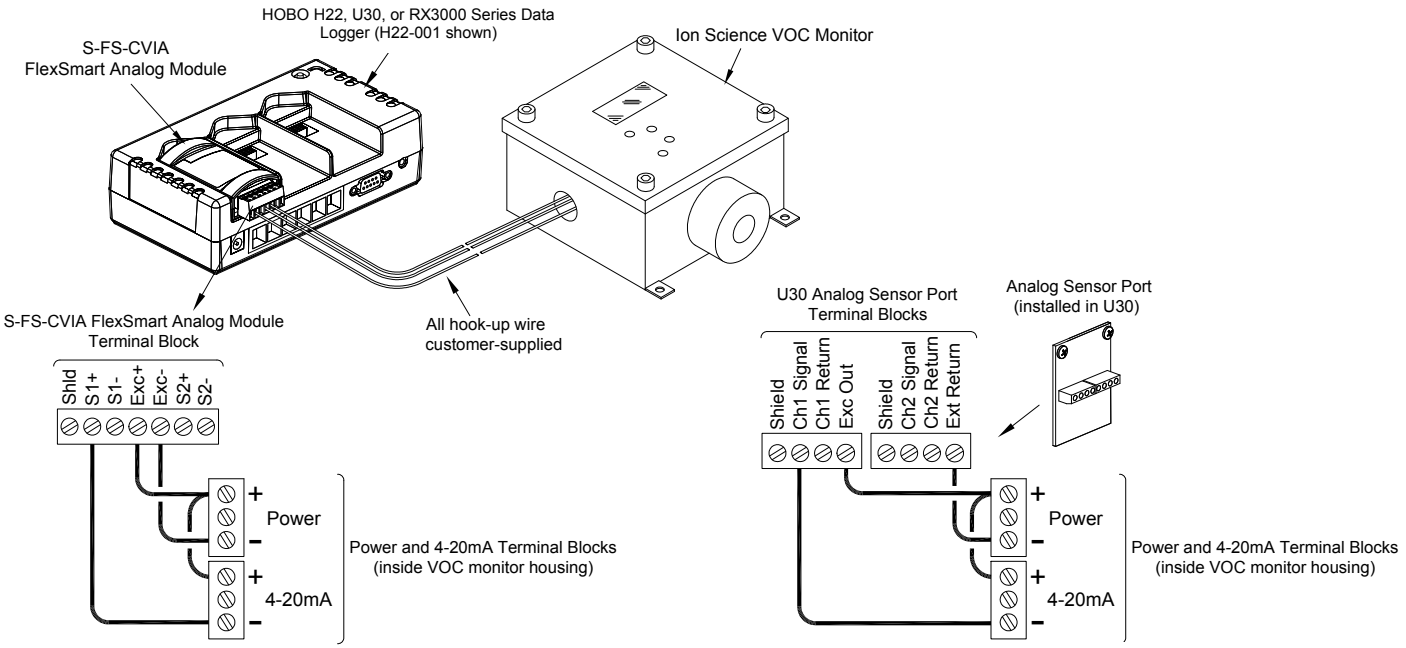
Ion Science VOC Monitor

Required

- Ion Science VOC Monitor listed above
- 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 RX300 series); 4-20mA cable, Onset Part No. CABLE-4-20mA or voltage adapter, Onset Part No. CABLE-ADAP5 (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 lengths of hook-up wire

Connecting the VOC Monitor to the Analog Module or Port

H22, U30, or RX3000 Connection



S-FS-CVIA Module Wiring Diagram
(for H22 series only)

Analog Sensor Port/Module Wiring Diagram
(U30 shown)

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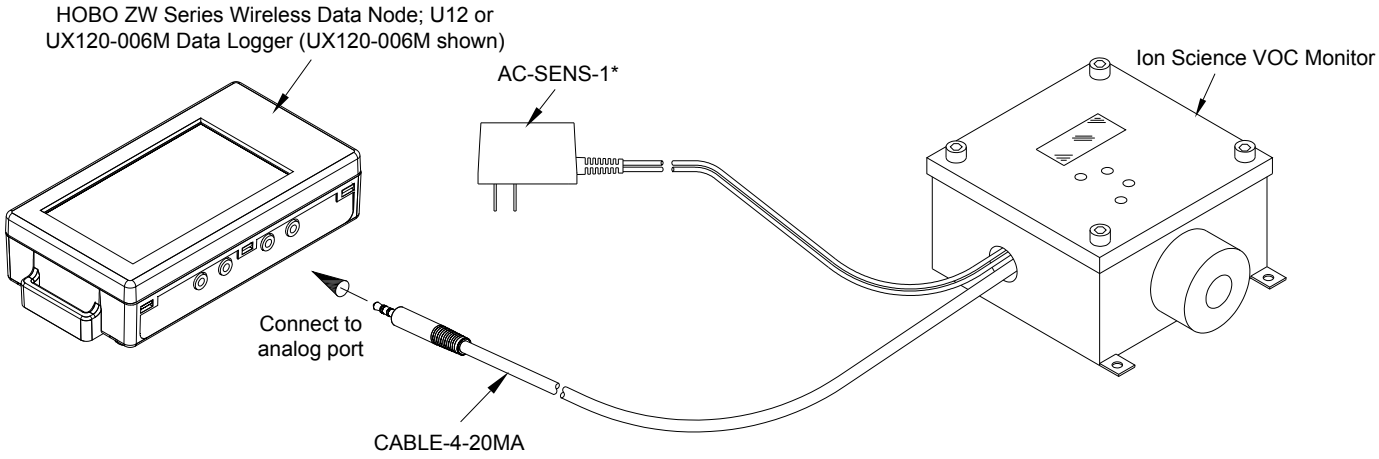
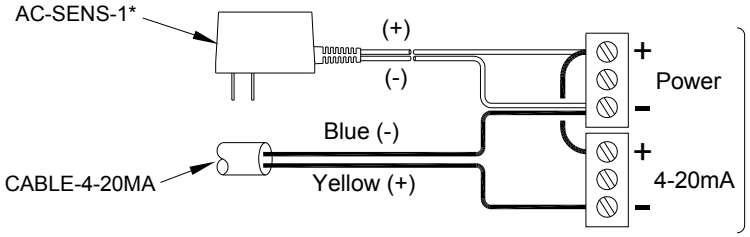
U12, ZW, or UX120-006M Connection





Power and 4-20mA Terminal Blocks
(inside VOC monitor housing)

*__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!

Configuring the Data Logger for the VOC Monitor using HOBOware Software

Note: HOBOware software provides a configuration file for the monitor. The table below lists the recommended configuration values that this file contains. For information on loading configuration files, refer to the software documentation.

Channel Name	Warm-Up*	Measurement Type	Raw Value 1	Raw Value 2	Raw Units	Scaled Value 1	Scaled Value 2	Scaled Units
VOC	Continuous	Current	4	20	mA	0	10 (or 100 or 1000)	ppm

*****Loop power of 22 mA can be provided by the FlexSmart Analog Module and H22 (or Analog Sensor Port/Module and U30 or RX3000). Lamp and electronics require 65 mA. **Note:** Providing continuous warm-up excitation power will accelerate data logger battery depletion. Therefore, we recommend using the appropriate Onset AC power adapter to power the logger.