

# FlexSmart™ Analog Module

(Part No: S-FS-CVIA)



## Quick Start Guide

Inside this package:

- FlexSmart Analog Module
- Detachable screw terminal block
- Imprintable label
- This guide

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Manual Part No: MAN-S-FS-CVIA  
Doc No: 10092-B

**Note:** Refer to the documentation provided with the Onset HOBO® Energy Logger Pro™ and HOBOWare® software for additional information on using and configuring the FlexSmart Analog Module.

## Introduction

Thank you for purchasing an Onset FlexSmart Analog Module. With proper care, it will give you years of accurate and reliable measurements.

The module is an easy-to-configure, flexible DC signal-conditioning module compatible with Onset's H22-001 HOBO Energy Logger Pro. This 2-channel module can accept a wide range of Onset or third-party sensors with 0-20V or 0-20mA output (including devices with a 4-20mA current loop interface).

The module features input protection and signal filtering as well as Delta-Sigma A/D conversion and factory calibration. Additionally, the module features extremely low-power operation, resulting in long battery life for unattended data logging applications.

## Specifications

Input Channels	2, single-ended
Field Wiring	2- or 3-wire via screw terminals on detachable terminal block, 16-24 AWG Replacement detachable terminal blocks: Part of spares kit, Onset part no: A-FS-CVIA-7P-1
Input Range	User-configurable: 0-20 mA DC, 0-20 VDC (suitable for 2.5, 5, 10V sensors)
Minimum / Maximum Input Voltage	0 / 24 VDC
Minimum / Maximum Input Current	0 / 24 mA DC
Minimum Current Source Impedance	> 20 KΩ
Accuracy	+/- 0.25% of FSR from 50mV to FSR
ADC Resolution	12 bits
Power Requirements	+3.3V @ 3mA active, 6µA sleep

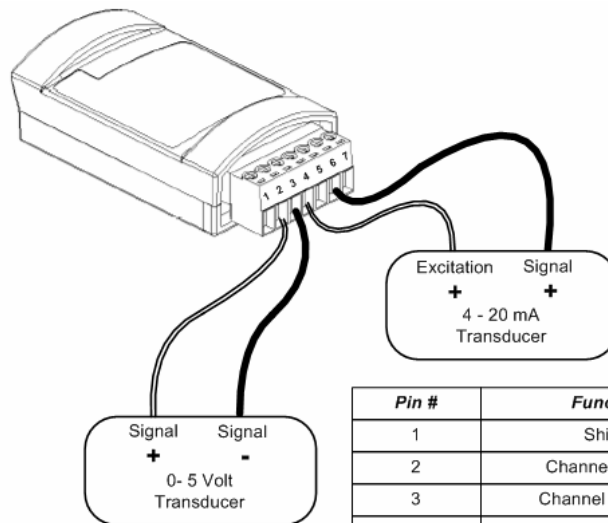
## Module Connections

**Note:** The S-FS-CVIA FlexSmart Analog Module is a single-ended sensor; pin numbers 3 and 7 are connected to signal ground and to each other.

The module has a 7-pin Phoenix-style terminal connector with a detachable screw terminal block. Sensors are connected to the module via this terminal block. Sensors connected to the module can be configured using HOBOWare software.

The diagram at right illustrates typical connections for a sensor with DC voltage output (requiring no excitation) and a sensor with DC current output (requiring excitation).

**Note:** For module connection instructions specific to sensors purchased from Onset, see the documentation provided with each sensor.



Pin #	Function
1	Shield
2	Channel 1 Input
3	Channel 1 Return
4	Excitation Voltage
5	Excitation Return
6	Channel 2 Input
7	Channel 2 Return