

# DATASHEET

## Analog 4-20 mA Module BM-A420-122S (1-Pack) BM-A420-122D (2-Pack)

The analog 4-20mA I/O module provides two 24-bit inputs and two 16-bit outputs. The I/O modules offer 2500 V r.m.s. isolation, with a wide operating temperature range and Class I Division 2 hazardous location rating, making them ideal for demanding industrial installations.

Connect them to the wireless I/O radios for point-to-point wire replacement applications, or to the RS485 I/O Extension module to add I/O to a Modbus network.



## Features

- ◆ *Easy to use:* No software configuration needed
- ◆ *Easy to install:* Mounts onto a 35 mm DIN rail without any tools
- ◆ *Fail-safe:* User can define how outputs are failed over when RF or I/O communication is ever lost
- ◆ *Number of Inputs:* 2 (24-bit Resolution)
- ◆ *Number of Outputs:* 2 (16-bit Resolution)
- ◆ *Isolation Voltage:* 2500 V r.m.s.
- ◆ *Accuracy:* < 0.28 % of Full Scale
- ◆ *Fail-Safe Modes:* Last known value (Default) or Any value on scale

## Specifications

### Hardware & System

Specification	Description
DIN Rail Mounting Compatibility	35 mm x 7.5 mm DIN Rail
I/O Module Slave ID Selection	16-Position rotary switch
Built-In Mounting Hardware	Spring-loaded clip-on system
Wire Gauge	Solid / Stranded (AWG) 28-12 gauge
Wire Rating	UL: 300 V RMS, 80 °C and 300 V, 105 °C CSA: 300 V RMS, 105 °C
Warranty	2-Year limited

### Analog 4-20 mA

Specification	Description
Number of Inputs	2 (24-bit Resolution)
Number of Outputs	2 (16-bit Resolution)
Isolation Voltage	2500 V r.m.s.
Signal Range	4 to 20 mA
Accuracy	< 0.28 % of Full Scale
Internal Loop Power	+13.5 VDC
FailSafe Modes	Last known value (Default) or Any value on scale <sup>3</sup>
AI Input Impedance (loop)	128 Ohm
AO Terminal Voltage Range	10 VDC Min. / 31.5 VDC Max.

<sup>3</sup>Requires Advanced User Interface to set a specific value on Analog I/O Module.

### Physical

Specification	Description
Power Consumption	Typical: 50 mA / Max: 75 mA @12 VDC
Packaging Dimensions (WxHxD)	4.8 x 5.1 x 2.8 in / 123 x 129 x 72 mm
Net Dimensions	0.7 x 3.9 x 4.5 in / 17.5 x 99 x 114 mm
Packaging Weight	Single: 0.5 lbs / 227 g Double: 0.8 lbs / 363 g
Net Weight (Single)	0.3 lbs / 136 g

### Safety & Compliance

Specification	Description
Operational Temperature	-40 °C to 80 °C / -40 °F to 176 °F
Storage Temperature	-20 °C to 85 °C / -4 °F to 185 °F
Humidity	0 to 99 %, Non-condensing
Degree of Protection / Housing Type	IP20 / Plastic
Hazardous Locations Classifications	UL Class I; Division 2 (Zone 2), Pending



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### Ordering Information

To order this product, please use the following:

#### Analog 4-20 mA Module

BM-A420-122S (1-Pack)

BM-A420-122D (2-Pack)

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft Technology distributors near you, go to:

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