

BV16

Analog input module

Overview

- Analog input module for Atlas devices
- Voltage measurement (-1V to +1V)
- Software programmable input type, filter and temperature of cold end with thermocouple individually, per channel
- Operation self-diagnostics
- LED indication of wire break and module operation/malfunction



Function description and application

Analog input module BV16 accepts analog signals from the process for internal processing control of Atlas Max®, Atlas XP2 and Atlas MTU controllers. All inputs are galvanically isolated from each other and from the data and address buses.

Design

BV16 module is designed as dual PCB Eurocard (233.4x162.5mm), with front mask dimensions 262x30mm for mounting in standard 19" racks.

Interface

Number of inputs	16
Interface type	differential

Technical specifications

Measuring range of input signals

• voltage input	-1V to 1V -0,5V to 0,5V -0,1V to 0,1V -50mV to +50mV 0 to 1V 0 to 0,5V 0 to 0,1V 0 to 50mV
• thermocouples	J, K, T, R, S, U, L, F, N, E, B, XJ
• input impedance	> 100 MOhm

A/D converter (per channel):

• resolution	24 bits
• accuracy	+/- 0.05%
• conversion time	20ms

Max input sampling rate

5 Hz

Galvanic isolation

per channel

Power supply

Internal +5VDC, 0.7A

External +12VDC, 0.6A