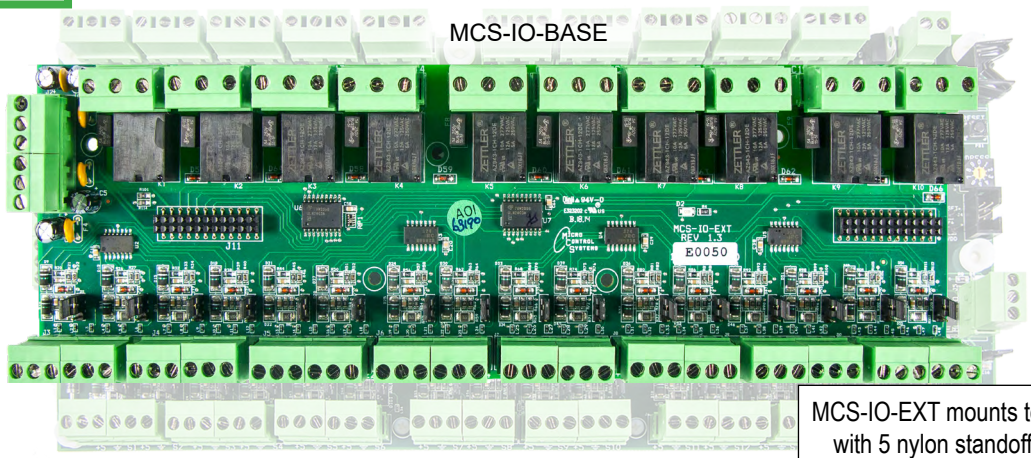
MCS-IO-EXT
Description & Specifications



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RoHS Compliant

MCS-IO-EXT mounts to the MCS-IO-BASE with 5 nylon standoffs and two stackers

Part # **MCS-IO-EXT**

Description

The **MCS-IO-EXT** provides a flexible and cost effective way to allow relay output, sensor input and analog output expansion for **MCS MAGNUM** and **Micromag**. Each MCS-IO-EXT can be paired with a MCS-IO-BASE to double the number of inputs and outputs. Each MCS-IO-EXT board is powered by the MCS-IO-BASE board once it is stacked on top. The printed circuit board is a four layer board with a separate power and ground plane to provide the ultimate in efficient electrical noise suppression. This coupled with noise suppression circuitry makes the MCS-IO-EXT virtually impervious to electrical noise. The MCS-IO-EXT provides sixteen sensor inputs. The inputs are universal and support either a digital or analog input signal.

The MCS-IO-EXT also provides four analog outputs that provide independent dc voltage outputs from 0 to 10vdc. These analog outputs are controlled by the MAGNUM/Micromag micro controllers.

Each input and output consists of a three position removable terminal block, providing +5vdc, ground and signal in. A polyfuse protects the +5vdc line from shorted sensors. The MCS-IO-base also provides ten relay outputs fused at 5.0 amps. Each relay output provides common, normally open and normally closed contacts on a removable terminal block. The terminal blocks provide screw connections which eliminate the need for sta-cons. Because the terminal blocks are removable, board replacement requires no wires to be removed. Once the MCS-IO-EXT is paired with the MCS-IO-BASE the number of sensors are expanded from 16 to 32, the number of analog outputs from 4 to 8, and the number of relays from 10 to 20 allowing twice the number of sensors, analog outputs, and relay outputs in the same footprint of one MCS-IO-BASE.

Specifications

Controller

Dimensions	10.7”l, x 3.5”w, 2.50”h
Mounting	Mounts on top of the MCS-IO-BASE on top of the MCS-IO-BASE by 5 nylon standoffs and 2 stackers headers (included on MCS-IO-BASE)
Operating Temperature	-40°F to +158°F (-40°C to +70°C)
Operating Humidity	0-95% Non-Condensing
Storage Temperature	-40°F to +158°F (-40°C to +70°C)
Sensor Inputs	16 inputs on base 0-5vdc with MCS-IO-EXT - 32 inputs total
Analog Outputs	4 outputs on base 0-10vdc
	with MCS-IO-EXT - 8 AO outputs
Relay Outputs	10 outputs on base 5amps @ 230VAC
Printed Circuit Board	Four layer with separate power and ground planes
Input Power	Powered by MCS-IO-BASE Power 12 vdc Regulated Power Supply
Minimum (Brown in)	9.29 vdc
Amp Draw (Loaded)	1.02 Amps (total IO Ext and IO Base)
Power Detection	Automatic Power Fail Reset on MCS-IO-BASE

Packaging

MCS-SHIELDWIRE-GROUNDING multi-terminal splicing connector with 9”- 16 awg wire with ring terminal (package of 2).

Kit of (5) #6-32 x 1” Female/Female Hex Nylon Tapped Spacers

Kit of (1) 12 Pin Double Strip Header, 2.54mm Center, Straight

Installation Sheet

Ship Weight	1.21 lb (approx)
Box Dimensions	12” x 5” x 3” (approx)

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Revision - 2025-03-13