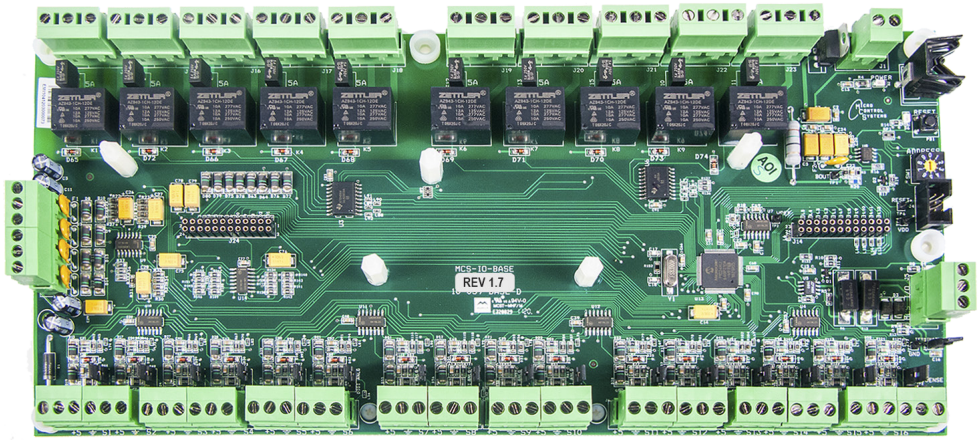
MCS-IO-BASE
Description & Specifications



RoHS Compliant

Part # **MCS-IO-BASE**

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File No: E169780

Description

The **MCS-IO-BASE** 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-BASE has a stand-alone microprocessor which communicates with a MAGNUM/Micromag over the MCS-I/O port at 38,400 baud. All data is check summed with auto error correction. Because communication is over a RS-485 long distance two-wire differential network transmission system, the MCS-IO-BASE may be located up to 5,000 feet away.

Each MCS-IO-BASE board can be powered by a 12VDC regulated power supply and has a automatic power fail reset system.

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-BASE virtually impervious to electrical noise.

The MCS-IO-BASE provides sixteen sensor inputs. The inputs are universal and support either a digital or analog input signal.

The MCS-IO-BASE 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. The MCS-IO-BASE allows one optional MCS-IO-EXT board to be stacked on top by using a board stacker header. Doing so will expand the number of sensors 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	12.0”l, 5.5”w, 2.50”h
Mounting	Mounts on a backplane using six #6 sheet metal screws
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 0-5vdc
Analog Outputs	4 outputs 0-10vdc
Relay Outputs	10 outputs 5amps @ 230VAC
Printed Circuit Board	Four layer with separate power and ground planes
Input Power (Standard)	12 vdc Regulated Power Supply
Minimum (Brown in)	9.30 vdc
Amp Draw (Loaded)	538.0 mA
MCS-I/O Comm Port	1 @ 38,400 Baud
Power Detection	Automatic Power Fail Reset

Packaging

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

Kit of (6) #6 x 1” Phillips Pan head Zinc Plated Steel Screws

Ship Weight ..... 1.65 lb (approx)

Box Dimensions..... 12” x 5” x 3” (approx)

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