

MCS-SI-EXT Description & Specifications





Part # MCS-SI-EXT



Description

The **MCS-SI-EXT** provides a flexible and cost effective way to allow sensor input and analog output expansion for **MCS MAGNUM** and **Micromag**.

Each MCS-SI-EXT can be paired with a MCS-SI-BASE to double the number of inputs and outputs. Each MCS-SI-EXT board is powered by the MCS-SI-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-SI-EXT virtually impervious to electrical noise. The MCS-SI-EXT provides sixteen sensor inputs. The inputs are universal and support either a digital or analog input signal.

The MCS-SI-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 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-SI-EXT is paired with the MCS-SI-BASE the number of sensors are expanded from 16 to 32, the number of analog outputs from 4 to 8 allowing twice the number of sensors, and analog outputs in the same footprint of one MCS-SI-BASE.

Specifications

Controller

Dimensions Mounting	8.7"l, x 2.50"w, x 2.50"h Mounts on top of the MCS-SI-BASE by 4 nylon standoffs and stacker header (included on MCS-SI-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 0-5vdc
Analog Outputs	4 outputs 0-10vdc
Printed Circuit Board	Four layer with separate power
	and ground planes
Input Power	Powered by MCS-SI-BASE Power
•	12 vdc Regulated Power Supply
Minimum (Brown in)	9.30 vdc
Amp Draw (Loaded)	423.0 mA (total SI Ext & SI Base)

Power Detection Automatic Power Fail Reset on MCS-SI-BASE

Packaging

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

Kit of (4) #6-32 x 1" Female/Female Hex Nylon Tapped Spacers

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

Installation Sheet

5580 Enterprise Pkwy., Fort Myers, FL 33905 Office: 239-694-0089 • Fax: 239-694-0031 www.mcscontrols.com

