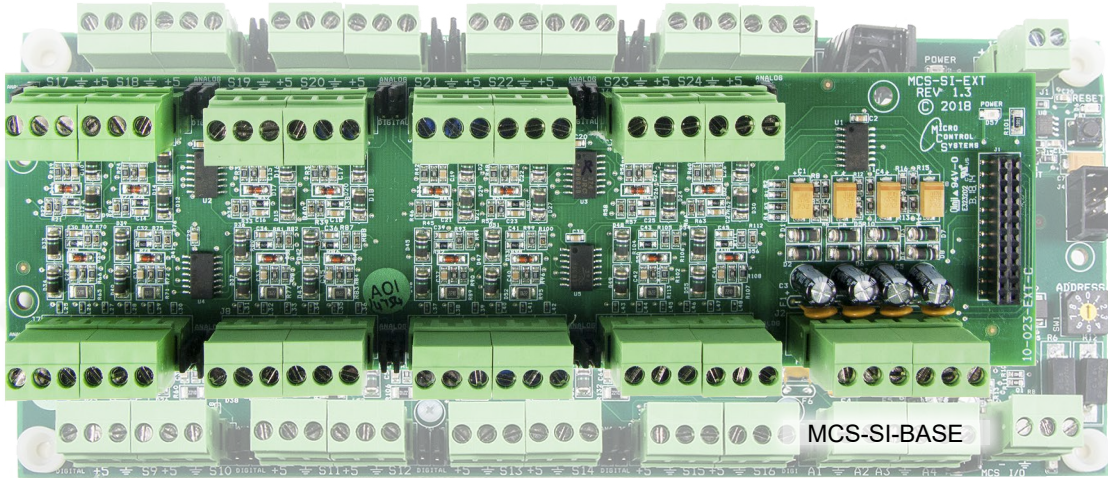




# MCS-SI-EXT

## 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.....             | 8.7"l, x 2.50"w, x 2.50"h  |
| Mounting.....               | 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   |
| Power Detection .....       | Automatic Power Fail Reset on MCS-SI-BASE  |

#### Packaging

|  |                              |
|--|------------------------------|
| 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   |                              |
| Ship Weight .....  | 0.73 lb (approx)             |
| Box Dimensions.....  | 10" x 4.5" x 3.375" (approx) |