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# **Backpanels Description**

The SCM7BP04, SCM7BP08, and SCM7BP16 (see Figures 10-13) are 4, 8, & 16 channel backpanels that can accept any of the SCM7B analog modules. All three of these backpanels can either be rack mounted using Dataforth's 19inch rack P/N SCMXRK-002 (using the provided 3mm screws), or directly mounted to a surface using #6 or smaller screws. The SCM7BP04-DIN, SCM7BP08-DIN, and SCM7BP16-DIN are identical to their standoff counterparts but with DIN rail mounting brackets attached instead of standoffs. These brackets allow the backpanels to be mounted on either EN 50022-35 x 7.5 (35 x 15) or EN 50035-G32 type DIN rails.

#### **System Side - Power**

Using the "V+" power supply input, the power supply voltage can be as little as +14VDC. If +15VDC is available, it is recommended that the supply be connected between the "V+A" or "V+B" connections and "COM"; this will protect the modules against accidental supply reversal. Using both these connections with two power supplies enables redundant power supply operation. It is also recommended that a diode transient absorber be installed to reduce power supply transient events from degrading system performance. An "accessory" location, between the supply and common lines, is provided for this purpose. A system side grounding #10-32 stud is also provided for use if desired. All backpanels are fused according to channel count, allowing 1/4 Amp per channel.

#### System Side - Signal

Two system interface DB25 connectors are used, to enable using both input and output modules simultaneously, or to route the signal from an input module backplane to an output module backplane. These backpanels use either the SCM7BXCA01 (DB25 to 26-pin adapter cable) and SCMXCA004-XX (26-pin to 26-pin interface cable), or the SCM7BXCA02 (DB25 to DB25 interface cable), depending on system requirements.

### Field Side - Signal

On the field side a temperature sensor is mounted underneath the field side terminal block to provide cold junction compensation for thermocouple modules. and a current-to-voltage conversion resistor (P/N SCM7BXR1) socket location is provided (supplied with SCM7B33 modules) for each channel. Field connections are terminated with three screw terminals.

## **Specifications**

Operating Temperature ATEX Group II, Category 3 Relative Humidity	-40°C to +85°C -20°C to +40°C 90%
Interface Connector: Field System	high density screw clamp, 10-24 AWG 2 DR25 (male) connectors with 4-40 screwlocks

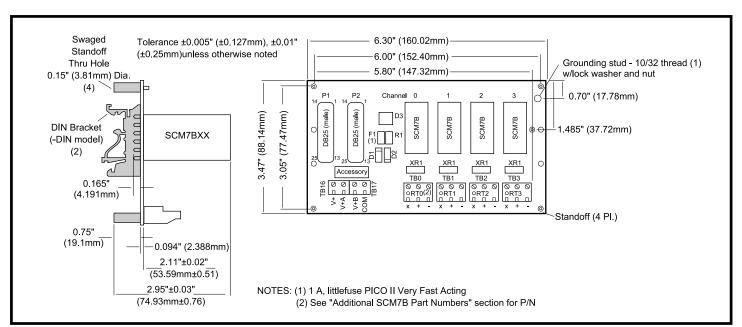


Figure 10: SCM7BP04(-DIN) Dimensions

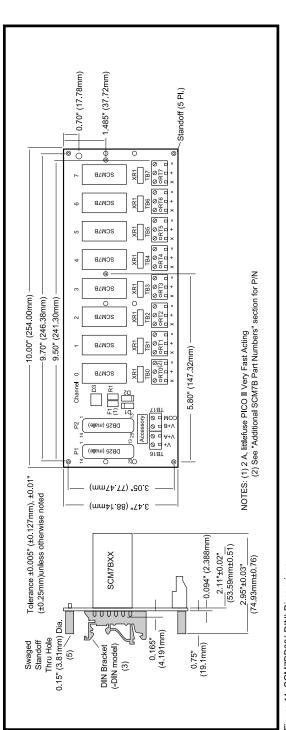


Figure 11: SCM7BP08(-DIN) Dimensions

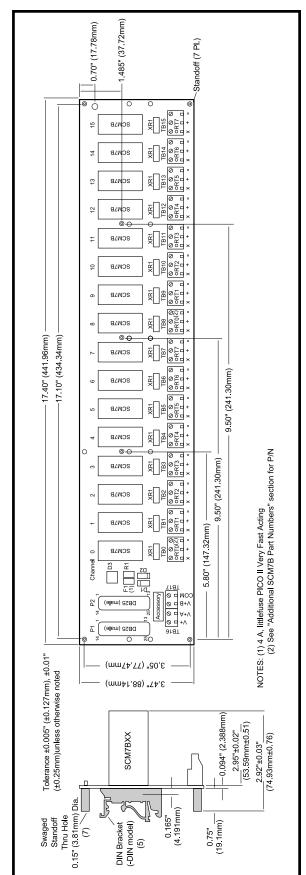


Figure 12: SCM7BP16(-DIN) Dimensions

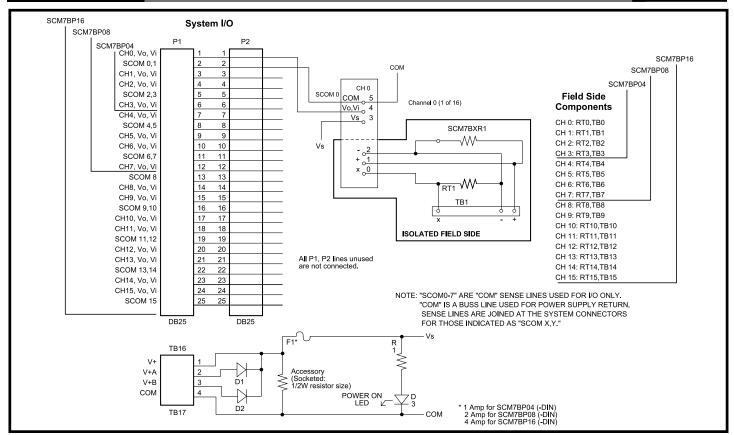


Figure 13: SCM7BP04/08/16(-DIN) Schematic Diagram