Accessories for SCM7B Analog Modules

SCM7BXEV

Description

The SCM7BXEV (Figure 1 and 2) is a single channel backpanel that can accept any of the SCM7B analog modules. It is meant to be used primarily for module evaluation. Unlike multiple channel backpanels, the single high-level system output (or input) signal is routed to all channel pins on the system interface DB25 connector. The backpanel contains four standoffs to allow mounting, using a #6 or smaller screw.

System Side - Power

Using the "V+" 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 module against accidental supply reversal. Using both these connections with two power supplies enables redundant 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. The backpanel is fused at 1/4 Amp for module protection.

System Side - Signal

The SCM7BXEV uses 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) socketing location is provided (supplied with SCM7B33 modules). Field connections are terminated with three screw terminals

Specifications

Operating Temperature	-40°C to +85°C
ATEX Group II, Category 3	-20°C to +40°C
Relative Humidity	90%
Interface Connector:	high density screw clamp, 10-24 AWG
Field	DB25 (male) with 4-40 screwlocks and
System	high density screw clamp, 10-24 AWG



Figure 1: SCM7BXEV Dimensions

NOTE: ALL CHANNELS COMMON THIS MODEL



Figure 2: SCM7BXEV Schematic Diagram