ISO-RACK16/P CONNECTION DIAGRAM

The ISO-RACK16/P series allows analog inputs for the CIO-DAS6400 and PCI-DAS6400/1600/1200/1000 series of A/D boards to be quickly and simply connected to ISO-5B series isolation and signal conditioning modules. The ISO-RACK16/P map a single analog input channel to a single ISO-5B module (A/D channel 0 is directly connected to module 1, channel 1 to module 2 etc).

**NOTES:**

1.) The board provides locations to install jumpers that allow the analog inputs from the controlling board to be directly connected to the output screw terminals. This allows hybrid systems in which analog inputs requiring isolation and/or signal conditioning to use the ISO-5B modules while other analog inputs can be connected directly to the host A/D board. A series of plated through jumper holes labeled Rx+ and Rx- jumper the analog inputs of the host A/D board directly to the screw terminals.

2.) A CJC reference sensor is provided with ISO-5B thermocouple modules and must be installed in the appropriate U1-U16 position.

3.) Shunt resistor positions R1-R16 allow each analog input channel to convert a current to a voltage.

4.) Connector P22 “16 CHANNEL IN” allows the ISO-RACK16/P to interface directly to 16 channel A/D boards utilizing 100 pin I/O connectors (see Connection Diagram for details). Connector P23 and P24 “64 CHANNEL IN/OUT” allows multiple ISO-RACK16/P boards to be daisy chained providing a direct connection to 64 channel A/D boards utilizing 100 pin I/O connectors (see Connection Diagram for details).

CONNECTOR PIN ASSIGNMENTS

Pins 35-50 of connectors P22, P23, and P24 have been wired 1:1 to provide access to some of the host A/D’s boards signals (see CONNECTOR MAP diagram for details). These signals are labeled “PASS” signals and the user should consult their DAS manual’s I/O connector pin assignment section to verify the actual signals which are available.

External power can be provided to Molex connector P21 from the PC power expansion plug inside the PC. Screw terminal P20 could also be used to provide external power.

**Typical Channel**

EXCITATION(-)  SIGNAL LOW

EXCITATION(+)  SIGNAL HIGH
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**Connector Map**
ISO-RACK16/P 32 channels

ISO-RACK16/P 48 channels

ISO-RACK16/P 64 channels