



Bitronics M87x Family

P30, P31 Digital Input/Output Modules

Key Features

- Eight isolated inputs (P30A) or sixteen isolated inputs (P31)/four isolated outputs
- Two input voltage ranges, jumper selectable
- 2000V ac, 1 min. isolation, I/O to I/O and I/O to case
- CompactPCI™ bus
- Hot swap support

The CompactPCI high speed Digital I/O modules feature 8 or 16 inputs, which are fully isolated from each other and the case. The terminals of 4 of these are shared with 4 output relays to allow confirmation of circuit operation. Other than the terminals themselves, the output relay circuits are completely independent of the inputs.

The Digital I/O Module inputs can be read by the Host Processor Board or the Analog/Digital Signal Processor Board. The Host Processor Board can distinguish any two digital events that happen more than 200us apart. Outputs can be turned on or off by the Host Processor based on commands received over communication links.

Inputs

- 8 or 16 isolated inputs (4 are shared with output terminals). Jumper selectable for voltage range
- **Low Input voltage range**
 - › 0 to 100V dc input range
 - › 15V dc +/- 1V (at 25C) threshold voltage
 - › 33k ohm input resistance
- **High Input voltage range**
 - › 0 to 300V dc input range
 - › 70V dc +/- 3.5V (at 25C) threshold voltage
 - › 153k ohm input resistance
- 200us channel-to-channel input time resolution
- Selectable input de-bounce time from 60ns to 260s in 60ns steps

Outputs

- 4 isolated outputs, terminals shared with 4 inputs. Jumper selectable NC or NO
- Outputs rated for 30A tripping per ANSI/IEEE C37.90
- 8 ms assert (Close time with N.O. jumper) output operating time
- 3 ms release (Open time with N.O. jumper) output operating time

Module Chassis Interface

- One cPCI connector, 2 mm, hard metric for interface to other modules in chassis
- Complies with CompactPCI version 2.0, supporting 32 bit and speeds to 33MHZ
- Complies with CompactPCI hot swap specification PICMG 2.1 R1.0

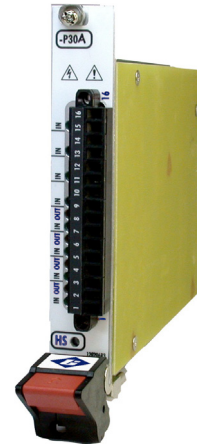
Front Panel Features

- Color indicator LEDs for inputs and outputs
- Module ejector handle
- Removable terminal block for ease of installation

Environmental

- -40C to +70C operating temperature
- 0-95% non-condensing relative humidity

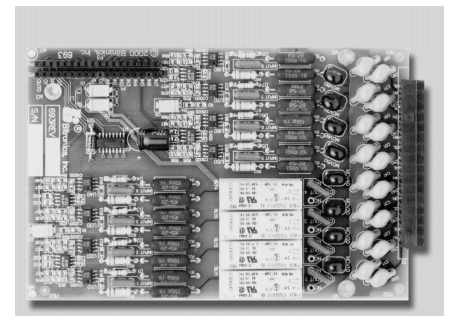
P30A, P31 Digital Input/Output cPCI Modules



P30A 8 Input Module



P31 16 Input Module



Reverse view with board removed showing utility grade relays.

Contact:

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