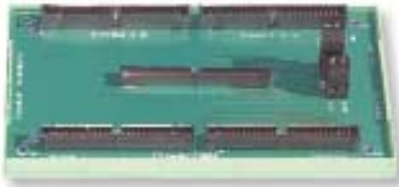


# PowerDAQ Digital Signal Conditioning



PD2-DIO-BPLANE16



PD2-DIO-CONN64-4



PD-SSR modules

## Features

- Connect up to 128 solid-state modules per board using the PD-DIO-CONN64-4 distribution panel
- Direct connection to all PowerDAQ boards
- Supports multiple boards
- Input Models:
  - 90–140V AC/DC
  - 180–280V AC/DC
  - 3.3–32V DC
- Output Modules:
  - 24–140V AC
  - 24–280V AC
  - 3–60V DC
- Color-coded housing
  - Digital AC output module = Black
  - Digital DC output module = Red
  - Digital AC input module = Yellow
  - Digital DC input module = White

## General Description

All PowerDAQ boards can control solid-state relays when combined with PD-SSR series modules, which are available as inputs for sensing changes or as outputs to send TTL signals for control purposes.

The PD-SSR senses logic levels and sends results to the PowerDAQ DIO subsystem. It also detects and reports opens and shorts. PD-SSR modules plug into a 16-channel backplane (PD2-DIO-BPLANE-16).

Up to four backplanes can connect to the PD2-DIO digital distribution panel (PD2-DIO-CONN-64-4), which distributes 64 lines into four groups of 16. For the PD2-DIO-128 use two PD2-DIO-CONN-64-4 panels.

The PD2-CONN-64-4 is DIN mountable and also has 5V, digital ground, latch and update signals.

The PowerDAQ Software Suite includes extensive software support for controlling and reading the digital signal-conditioning products. Support is included for Visual C++, Delphi, Visual Basic, Borland C++, LabVIEW, TestPoint, DASYLab, Agilent VEE and DIAdem software.

## Technical Specifications

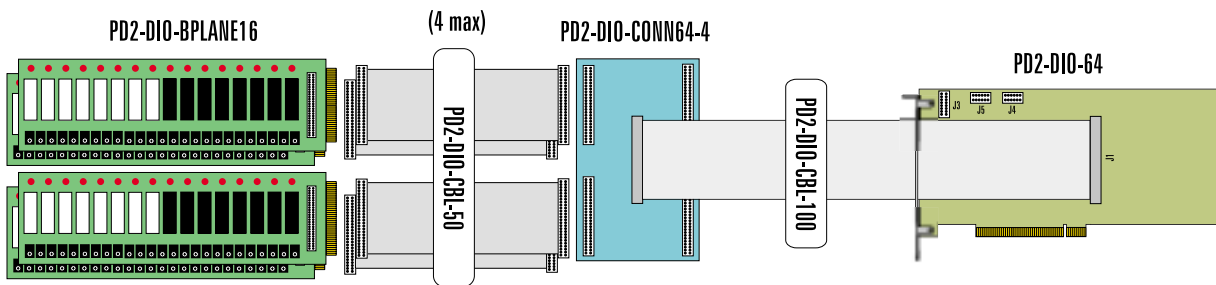
### Digital Input Modules

Ordering Information	Nominal Input	Input Voltage	Max Input Current	Max 5V DC Current	Max Turn-On Time	Max Turn-Off Time
PD-SSR-IAC-5	120V AC	90–140V AC/DC	10 mA	16 mA	20 ms	30 ms
PD-SSR-IAC-5A	240V AC	120–280V AC/DC	10 mA	16 mA	20 ms	30 ms
PD-SSR-IDC-5	3.3–32V DC	3.3–32V DC	32 mA	16 mA	1 ms	1 ms

# PowerDAQ Digital Signal Conditioning

## Digital Output Modules

Ordering Information	Nominal Output Voltage	Output Voltage Range	Maximum Output Current	Max 5V DC Current	Response Time
PD-SSR-OAC-5	120V AC	24–140V AC	3.5A	18 mA	0.5 cycles
PD-SSR-OAC-5A	240V AC	120–280V AC/DC	3.5A	19 mA	0.5 cycles
PD-SSR-ODC-5	3–60V DC	3–60V DC	3.0A	16 mA	25 $\mu$ s (on) 50 $\mu$ s (off)



## Digital I/O Configurations by Host Board Type

PowerDAQ Model	Digital Inputs	Digital Outputs	Configuration
PD2-DIO-64	Configurable in groups of 16 lines. Max groups = 4	Configurable in groups of 16 lines. Max groups = 4	Use PD2-DIO-CBL-100, PD2-DIO-CONN64-4, PD2-DIO-CBL-50, PD2-DIO-BPLANE-16
PD2-DIO-128	Configurable in groups of 16 lines. Max groups = 8	Configurable in groups of 16 lines. Max groups = 8	Qty 2 of PD2-DIO-CBL-100, PD2-DIO-CONN64-4, PD2-DIO-CBL-50, PD2-DIO-BPLANE-16
PD2-MF, PD2-MFS	16	16	PD-CBL-3650-16I, PD-CBL-3650-16O or PD-CBL-3650-8/8
PD2-AO	8	8	PD-CBL-3650-8/8

## Ordering Information

### Digital Input Modules

PD-SSR-IAC-5.....Nominal input 120V AC; input voltage 90V–140V AC/DC  
 PD-SSR-IAC-5A.....Nominal input 240V AC; input voltage 120V–280V AC/DC  
 PD-SSR-IDC-5.....Nominal input 3.3V–32V DC; input voltage 3.3V–32V DC

### Digital Output Modules

PD-SSR-OAC-5.....Nominal output 120V AC; output voltage 24V–140V AC  
 PD-SSR-OAC-5A.....Nominal output 240V AC; output voltage 120V–280V AC/DC  
 PD-SSR-ODC-5.....Nominal output 3V–60V DC; output voltage 3V–60V DC

### Accessories

PD2-DIO-BPLANE16.....16-channel solid state relay backplane  
 PD2-DIO-CONN64-4.....Distribution board (converts 100-way connector to four 50-way industry standard IDC header connectors)  
 PD2-DIO-CBL-100.....100-way, 1m cable  
 PD2-DIO-CBL-50.....18" 50/50-way IDC ribbon cable, connects PD2-DIO-CONN64-4 to PD2-DIO-BPLANE16