48-Channel Digital I/O Board For IBM PC and Compatibles

CIO-DIO48 and CIO-DIO48H

3 YEAR WARRANTY CE DI/O

✔ **48 TTL Digital I/O Lines**
✔ **Single 50-Pin Connector Carries All 48 Digital Lines plus Power**

CIO-DIO48 shown smaller than actual size.

The CIO-DIO48 can control 48 devices or sense 48 contact closures from a single half-size card in a pc. The CIO-DIO48 employs two 8255 parallel peripheral interface chips which are pro-grammable in three modes; simple byte input or output or strobed I/O. The 8255 is simple to program. The CIO-DIO48 can provide 2.5 mA to activate other chips, but not enough for LED's or relays. The CIO-DIO48H can source 15 mA or source 64 mA, enough for switching most relays and SSR's. Each 8255 has 24 I/O lines. The chip is configured as three ports. Two ports, A & B, are 8-bits wide, while port C may be an 8-bit port or two 4-bit ports. Individual ports may be configured as input or output, and are written to or read from as a unit.
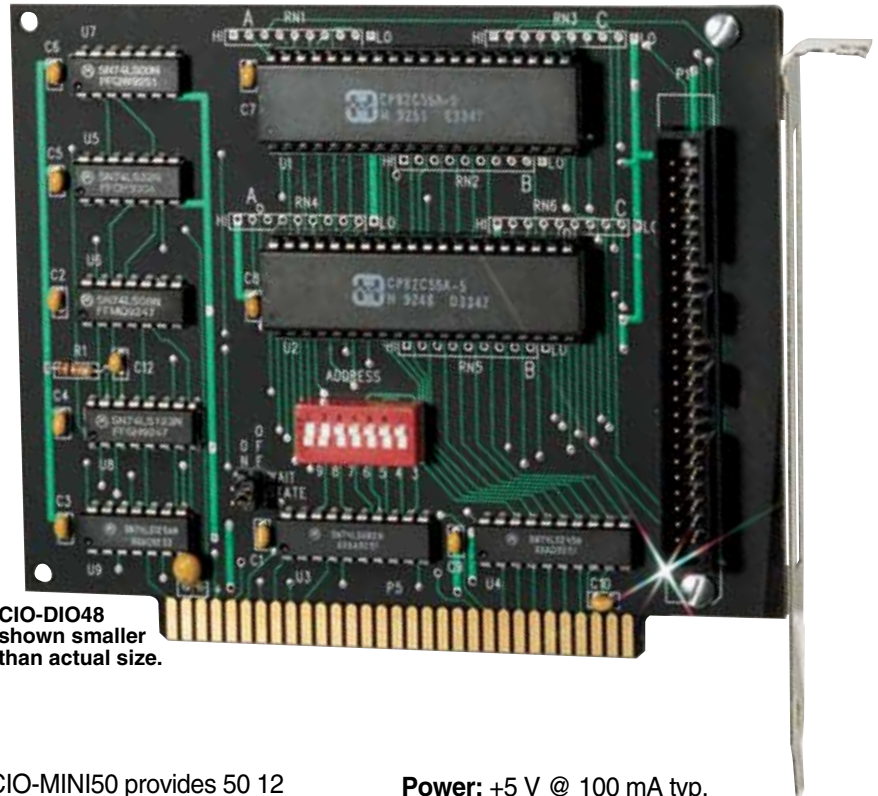
The CIO-DIO48 is a member of a family of digital I/O boards which use a 50-pin connector. Applications can easily be sized from 48 to 192 digital I/O points or more. Software is extensible to multiple points and all the accessories, including screw terminal boards, electro-mechanical relay boards and solid state relay boards interface to the same connector, regardless of which digital I/O board is used.

Base Address
To program and control the DIO board, the PC writes to and reads from the I/O address assigned to the board. The DIO boards' address is set by selecting a base address via the base switch.

Cabling and Connection
Cabling to the CIO-DIO48 is via standard 50-pin, 0.10" spacing AMP type ribbon cable connectors. Each cable carries 48 digital I/O lines, +5 V and ground.

The CIO-MINI50 provides 50 12 to 22 AWG screw terminals. The SSR-RACK24 mounts 24 solid state relays, and the CIO-ERB24 mounts 24 electro-mechanical relays.

Specifications
TTL Output High: 3.0 V min @ -2.5 mA
TTL Output Low: 0.4 V max @2.5 mA
TTL Input High: 2.0 V min, 7 V max
TTL Input Low: -0.5 V min, 0.8 V max
Current Drive: CIO-DIO48 (source or sink): 2.5 mA CIO-DIO48H (source): 15 mA; (sink): 64 mA

Power: +5 V @ 100 mA typ, 200 mA max
Operating Ambient: 0 to 50°C (32 to 122°F); 0 to 90% RH, non-condensing
Storage Ambient: -20 to 70°C (-4 to 158°F)
Weight: 142 g (5 oz)

OMEGACARE Extended Warranty Program

To Order

Model No.	Description
CIO-DIO48	48 channel digital I/O board
CIO-DIO48H	48 channel high drive digital I/O board
CIO-MINI50	50 channel 4 x 4" screw terminal board, requires cable
SSR-RACK24	24 channel solid state relay mounting rack, requires cable and solid state relays (see section H)
CIO-ERB24	24 channel electro-mechanical relay board, requires cable
C50FF-2	50-conductor connection cable, 2 ft

Comes complete with installation calibration and test utility, programming libraries for Windows XP SP2/Vista/7, LabVIEW drivers and operator's manual on CD.

***Ordering Example: CIO-DIO48H** digital I/O board with **CIO-MINI50** terminal panel and **C50FF-2** cable and **OCW-1 OMEGACARE**[SM] 1 year extended warranty (adds 1 year to standard 3 year warranty).*