



DIO-120 Discrete Input/Output Board

Description

The DIO-120 is the wall mount version of the Discrete Input/Output Board of the DXI or DXL system. It provides interfaces that monitor external switches or drive external outputs.

It has an input capacity of 48 contact closure monitor points, which may be software configured for either supervised or non-supervised operation. With terminating resistors installed, supervised inputs can detect open circuit and short circuit trouble conditions as well as the independent status of one or two switches per circuit.

Each DIO-120 can also have either 48 solid-state output drivers or 16 relay outputs. Solid-state drivers are available in voltage source, current sink, and LED types. Each relay output provides both normally open and normally closed contacts.

Features

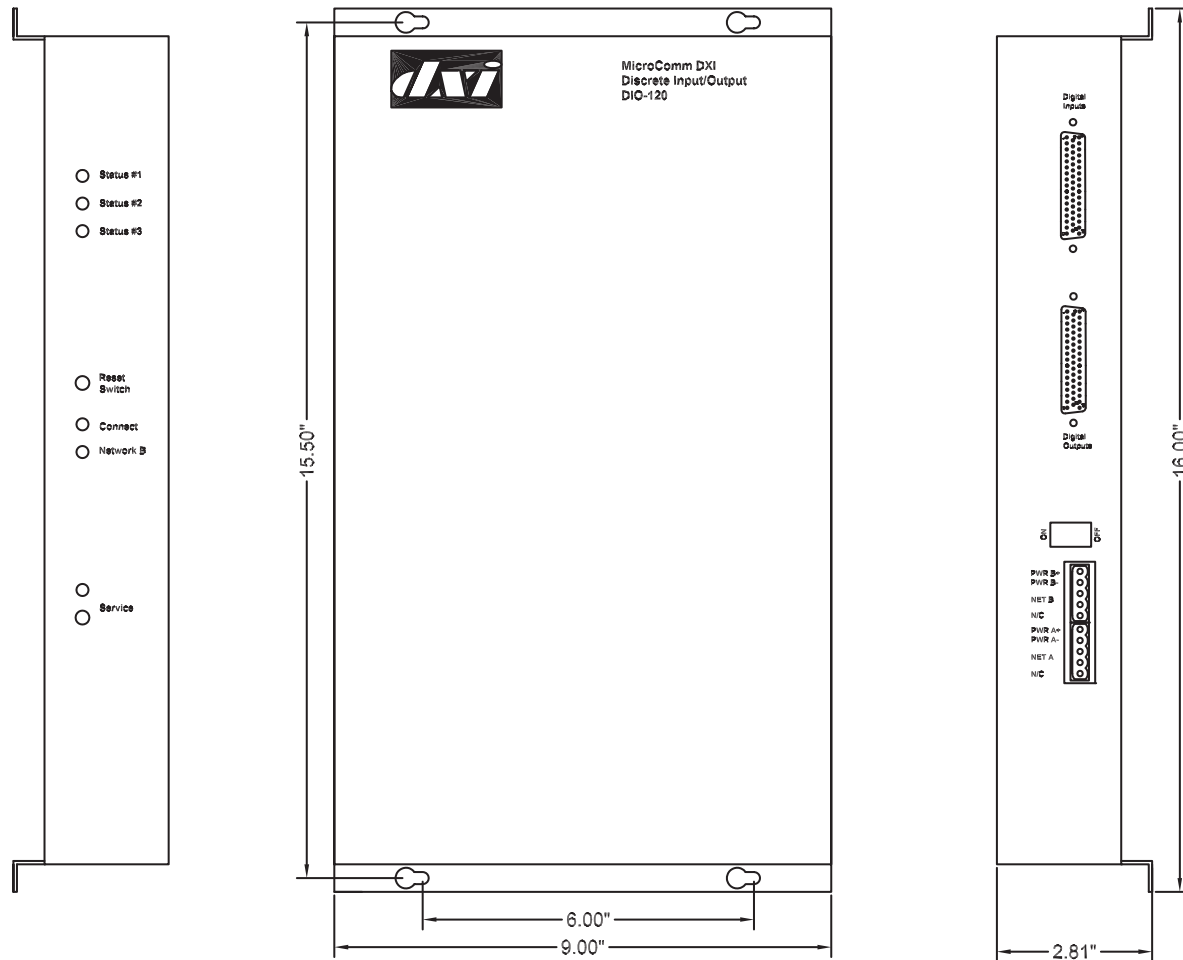
- 48 supervised or non-supervised inputs
- with terminating resistors, each supervised input can monitor one or two distinct contacts for a total of up to 96 contacts
- supervised inputs detect open and short circuit faults in field wiring
- 2000 V transient protection on all inputs
- 48 current sinking, voltage source, or LED driver outputs or 16 form C relay outputs
- form C relay outputs with normally open, normally closed, and common contacts
- high current switching of external devices
- short circuit protection on all outputs
- automatic self-test on power up and from SAC computer command
- full functional test with use of optional I/O Test Module
- self-test functions can be operated from the SAC computer
- flash memory enables updating of the firmware over the network
- 2 LED's indicate network status
- 3 LED's indicate operating status
- reset switch
- can be installed or removed without disrupting system operation
- depluggable terminal blocks and connectors for ease of installation and maintenance
- internal fuse protects circuitry



Specifications

Physical	16" H x 9" W x 2.75" D (403 x 229 x 70 mm)
Environmental	
Operating Temperature	32 to 122 °F (0 to 50 °C)
Storage Temperature	-40 to 158 °F (-40 to 70 °C)
Humidity	0 to 95 % non-condensing
Power Supply	+12 Vdc \pm 10% @ 2 A max +24 Vdc \pm 10% - 40% @ 2 A max
Field Connections	
Input	DB-50 with quick release lock
Output	DB-50 with quick release lock
Power and network	depluggable screw terminal blocks
Cabling	
\pm 12 Vdc	max distance 12 ft (4 m) w/12 ga
\pm 24 Vdc	max distance 150 ft (45 m) w/12ga
I/O Capacity	48 supervised inputs and/or 16 or 48 outputs
Input	23K ohm pull up to 12Vdc
Output	
source	12 Vdc 30 mA max
LED	10 mA
sink	30mA max
relay	form C 30 Vdc max, 400 mA max
Standards	FCC Part 15

Mechanical



Ordering Information

Part number DIO-120-ABC

- A power supply options
 - 1 12 Volt
 - 2 24 Volt
- B input options
 - 1 contact
- C output options
 - 0 none
 - 1 source
 - 2 LED
 - 3 sink
 - 4 relay

Accessories

Field Interface Cables

CBL-140-A

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