Input Specifications	
Inputs per Module	16 (sink/source)
Rated Voltage	12–24 VDC
Operating Voltage Range	10.2–26.4 VDC, Max 30VDC
Input Current	3.5mA @ 12VDC 7.5 mA @ 24VDC
Maximum Input Current	10mA @ 26.4 VDC
Input Impedance	3kΩ
Minimum ON Current	2mA
Maximum OFF Current	1.6 mA
ON Voltage Level	>9VDC
OFF Voltage Level	<4.5 VDC
OFF to ON, ON to OFF Response	2ms Maximum, 1ms Typical
Status Indicators	Logic Side (16 points)
Commons Per Module	2 (8 points/common) Isolated
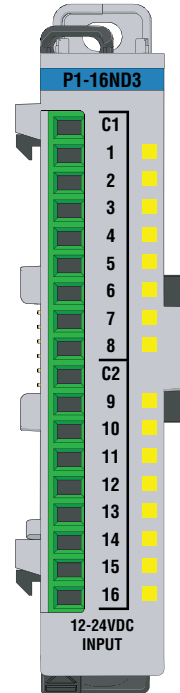
# P1-16ND3 Fast Response DC Input

The P1-16ND3 Fast Response Input Module provides sixteen 12–24 VDC sink/source inputs with two isolated commons for use with the Productivity1000 System.

P1-16ND3

C1
1
2
3
4
5
6
7
8
C2
9
10
11
12
13
14
15
16

12-24VDC
INPUT

Terminal Block sold separately, (see wiring options on page 3).
Warranty: Thirty-day money-back guarantee. Two-year limited replacement (See www.productivity1000.com for details).

WARNING: Do not add or remove modules with field power applied.

Step One: With latch in "locked" position, align connectors on the side of each module and stack by pressing together. Click indicates lock is engaged.
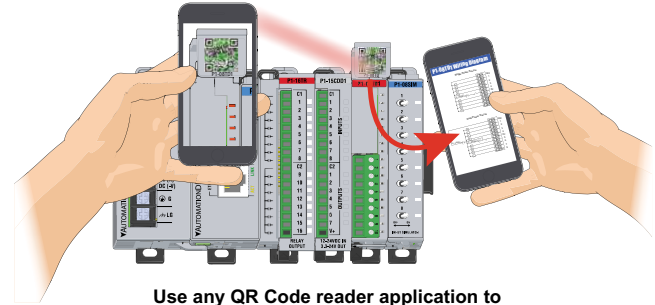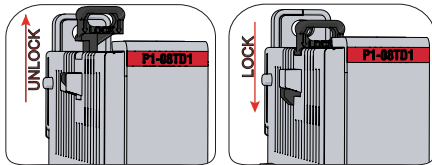

Check all latches are secure after modules are connected.
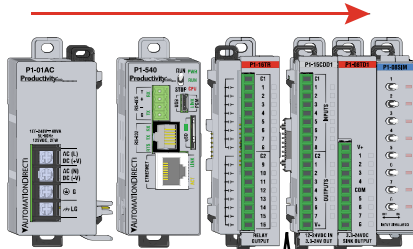
Step Two: Attach field wiring using the removable terminal block or *ZIPLink* wiring system.

WIRE STRIP LENGTH

MAX
MIN
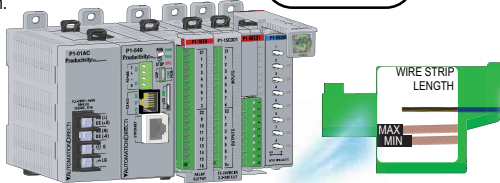
Step Three: To unstack modules, pull locking latch up into the unlocked position and then pull modules apart.

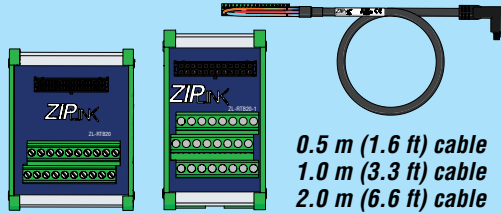UNLOCK   P1-08TD1

LOCK   P1-08TD1

Use any QR Code reader application to display the module's product insert.

Wiring Options

1 *ZIP*Link Feed Through *Modules and Cables*[1]

ZIPLINK
▼AUTOMATIONDIRECT®

ZL-RTB20
ZL-RTB20-1

0.5 m (1.6 ft) cable
1.0 m (3.3 ft) cable
2.0 m (6.6 ft) cable

ZL-P1-CBL18
ZL-P1-CBL18-1
ZL-P1-CBL18-2

2 *Terminal Block with pigtail cable*

1.0 m (3.3 ft) cable
2.0 m (6.6 ft) cable
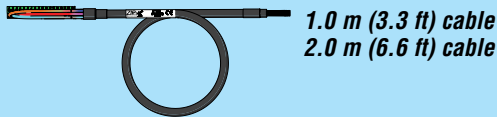
ZL-P1-CBL18-1P
ZL-P1-CBL18-2P

3 *Screw Terminal Block only*

P2-RTB
(Quantity 1)

4 *Spring Clamp Terminal Block only*

P2-RTB-1
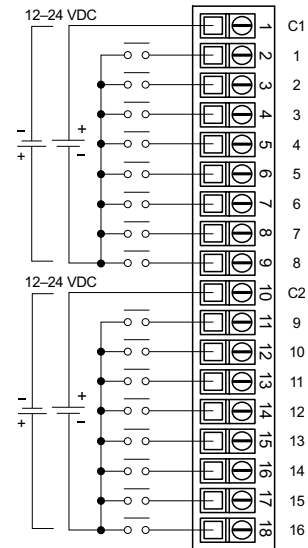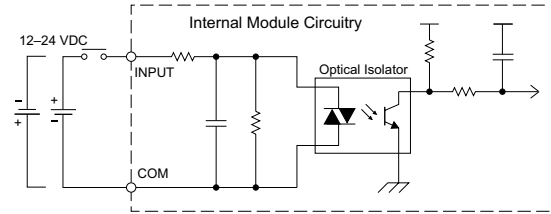(Quantity 1)

5 *Accessories*[2]

ZL-RTB-COM

TW-SD-SL-1

TW-SD-MSL-1

1. Cable + *ZIP*Link Module = Complete System
2. ZL-RTB-COM provides a common connection point for power or ground

Equivalent Input Circuit

WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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Terminal Block Specifications

Part Number	P2-RTB	P2-RTB-1
Positions	18 Screw Terminals	18 Spring Clamp Terminals
Wire Range	30–16 AWG (0.051–1.31 mm²) Solid / Stranded Conductor 3/64 in (1.2 mm) Insulation Max. 1/4 in (6–7 mm) Strip Length	28–16 AWG (0.081–1.31 mm²) Solid / Stranded Conductor 3/64 in (1.2 mm) Insulation Max. 19/64 in (7–8 mm) Strip Length
Conductors	"USE COPPER CONDUCTORS, 75ºC" or equivalent.	
Screw Driver	0.1 in (2.5 mm) Maximum*	
Screw Size	M2	N/A
Screw Torque	2.5 lb·in (0.28 N·m)	N/A

*Recommended Screw Driver TW-SD-MSL-1

General Specifications

Surrounding Air Temperature	0° to 60°C (32° to 140°F)
Storage Temperature	-20° to 70°C (-4° to 158°F)
Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2-6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Field to Logic Side Isolation	1800VAC applied for 1 second
Insulation Resistance	>10MΩ @ 500VDC
Heat Dissipation	3500mW
Enclosure Type	Open Equipment
Module Location	Any I/O position in a Productivity1000 System.
Field Wiring	Use *ZIP*Link Wiring System or removable terminal block (Sold Separately). See "Wiring Options" on page 3.
EU Directive	See the "EU Directive" topic in the Productivity Suite Help File. Information can also be obtained at: www.productivity1000.com
Terminal Type (sold separately)	18-Position Removable Terminal Block
Weight	71g (2.5oz)
Agency Approvals	UL 61010-1 and UL 61010-2-201 File E139594, Canada & USA CE (EN 61131-2 EMC, EN 61010-1 and EN 61010-2-201 Safety)*

*See CE Declaration of Conformance for details.