Input Specifications	
Inputs per Module	8
Rated Voltage	100–240 VAC
Operating Voltage Range	80–288 VAC
AC Frequency	47–63 Hz
Input Current	7mA @ 100VAC (50Hz) 8.5 mA @ 100VAC (60Hz) 14.2 mA @ 240VAC (50Hz) 17mA @ 240VAC (60Hz)
Maximum Input Current @ Temp	26mA @ 60°C (288VAC)
Input Impedance	15kΩ (50Hz), 12kΩ (60Hz)
ON Voltage Level	> 70VAC
OFF Voltage Level	< 20VAC
Minimum ON Current	5mA
Maximum OFF Current	2mA
OFF to ON Response	< 10ms
ON to OFF Response	< 25ms
Status Indicators	Logic Side (8 points)
Commons per module*	2 Isolated (4 points/common) @ 120VAC 2 Non-Isolated @ 240VAC

*C1 and C2 must be jumped together by an external wire during 240VAC applications.
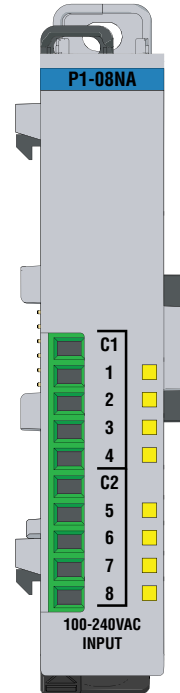
P1-08NA AC Input

The P1-08NA AC Input Module provides eight 100–240 VAC inputs for use with the Productivity1000 system.

P1-08NA

C1
1
2
3
4
C2
5
6
7
8
100-240VAC
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).

Module Installation

QR Code

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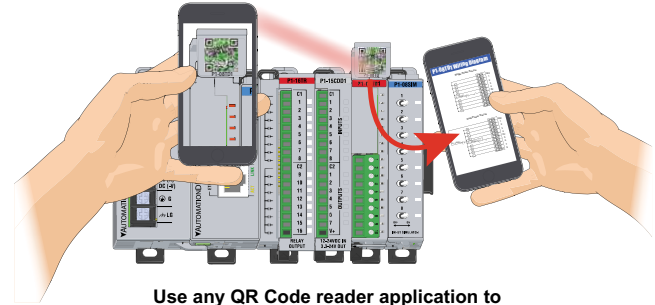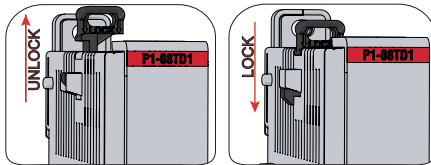
Check all latches are secure after modules are connected.
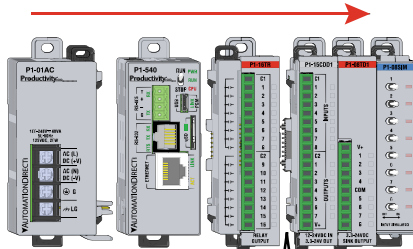
Step Two: Attach field wiring using the removable terminal block or *ZIP*Link wiring system.

WIRE STRIP LENGTH

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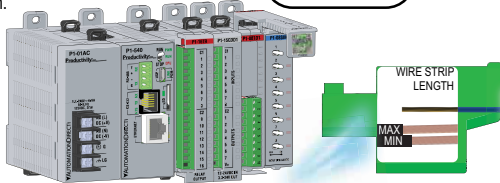
Step Three: To unstack modules, pull locking latch up into the unlocked position and then pull modules apart.
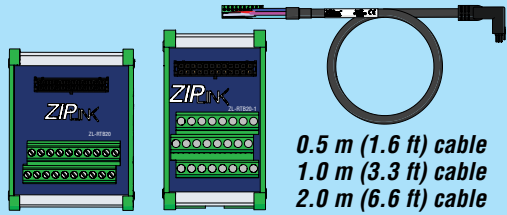
UNLOCK

LOCK

P1-08TD1

P1-08TD1

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

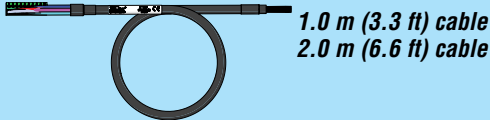## Wiring Options

1 ZIPLink Feed Through *Modules and Cables*[1]

ZIPLINK
AUTOMATIONDIRECT®

ZL-RTB20
ZL-RTB20-1

0.5 m (1.6 ft) cable ZL-P1-CBL10
1.0 m (3.3 ft) cable ZL-P1-CBL10-1
2.0 m (6.6 ft) cable ZL-P1-CBL10-2

2 Terminal Block with pigtail cable

1.0 m (3.3 ft) cable ZL-P1-CBL10-1P
2.0 m (6.6 ft) cable ZL-P1-CBL10-2P

3 Screw Terminal Block only
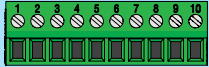
P1-10RTB
(Quantity 1)

4 Spring Clamp Terminal Block only
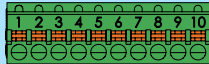
P1-10RTB-1
(Quantity 1)

5 Accessories[2]

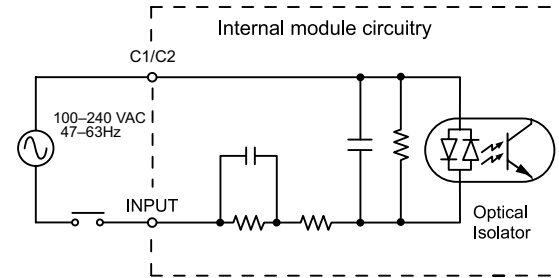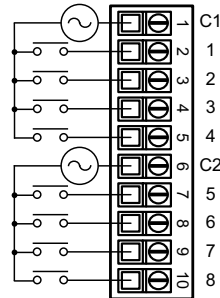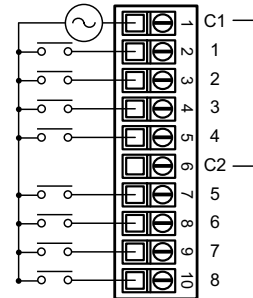ZL-RTB-COM

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

P1-08NA Schematic

Internal module circuitry

C1/C2

100–240 VAC
47–63Hz

INPUT

Optical Isolator

100–134 VAC
47–63 Hz

	C1
1	1
2	2
3	3
4	4
5	C2
6	5
7	6
8	7
9	8
10	

135–240 VAC
47–63 Hz

C1 and C2 must be linked externally for this voltage range

Terminal Block Specifications

Part Number	P1-10RTB	P1-10RTB-1
Positions	10 Screw Terminals	10 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, 75°C" 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

Operating Temperature	0º to 60ºC (32º to 140ºF)
Storage Temperature	-20º to 70ºC (-4º to 158ºF)
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	1800mW
Enclosure Type	Open Equipment
Module Location	Any I/O position in a Productivity1000 System
Field Wiring	Removable terminal block. Use **ZIP**Link Wiring System optional (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)	10-position Removable Terminal Block
Weight	70g (2.5 oz)
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.

Document Name	Edition/Revision	Date
P1-08NA-DS	2nd Edition	9/17/2019