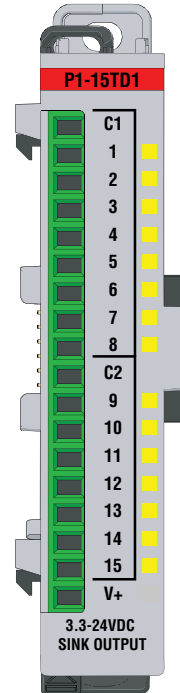


Output Specifications	
<b>Outputs per Module</b>	15 sinking
<b>Output Type</b>	N-channel MOSFET, open drain
<b>Voltage Rating</b>	3.3–24 VDC
<b>Operating Voltage Range</b>	2.9–26.4 VDC
<b>Maximum Output Current</b>	1A per point / 8A per common
<b>Minimum Load Current</b>	1mA
<b>Maximum Leakage Current</b>	0.3 mA @ 30VDC
<b>On Voltage Drop</b>	0.2 VDC @ 1A
<b>Maximum Inrush Current</b>	4A for 50ms, 6A for 10ms
<b>OFF to ON, ON to OFF Response</b>	≤0.5 ms
<b>Status Indicators</b>	Logic Side (15 points)
<b>Commons Per Module</b>	2 non-isolated
<b>Maximum Applicable Fuse</b>	8A
<b>External Power Supply Required</b>	12–24 VDC (-15% / +20%) @ 22mA



## P1-15TD1 Sinking DC Output

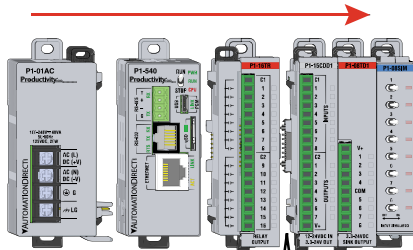
The P1-15TD1 DC Output Module provides fifteen outputs that sink up to 1A per point from loads powered by 3.3–24 VDC for use with the Productivity1000 system.

Output Specifications	1
Module Installation	2
QR Code	2
Wiring Options	3
Schematic & Wiring Diagram	3
General Specifications	4
Terminal Block Specifications	4
Warning	4

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

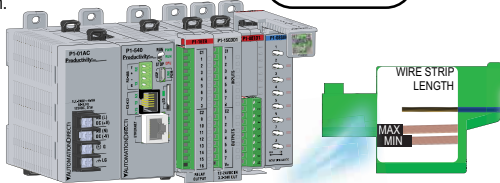
**WARNING:** Do not add or remove modules with field power applied.

**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.

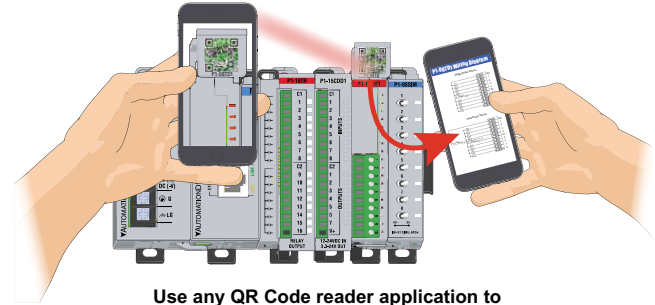
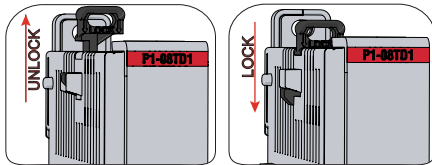


**Step Two:** Attach field wiring using the removable terminal block or ZIPLink wiring system.

Check all latches are secure after modules are connected.



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

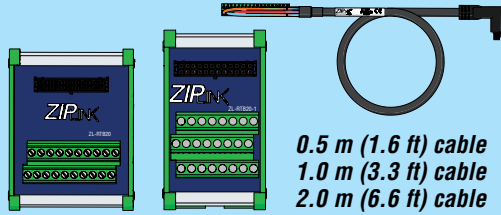


Use any QR Code reader application to display the module's product insert.

# P1-15TD1 Schematic and Wiring Diagram

## Wiring Options

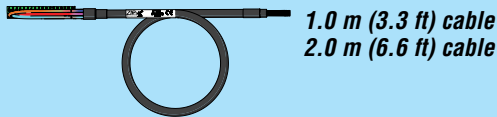
### 1 ZIPLink Feed Through Modules and Cables<sup>1</sup>



ZL-RTB20  
ZL-RTB20-1

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

### 2 Terminal Block with pigtail cable



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

### 3 Screw Terminal Block only



P2-RTB  
(Quantity 1)

### 4 Spring Clamp Terminal Block only



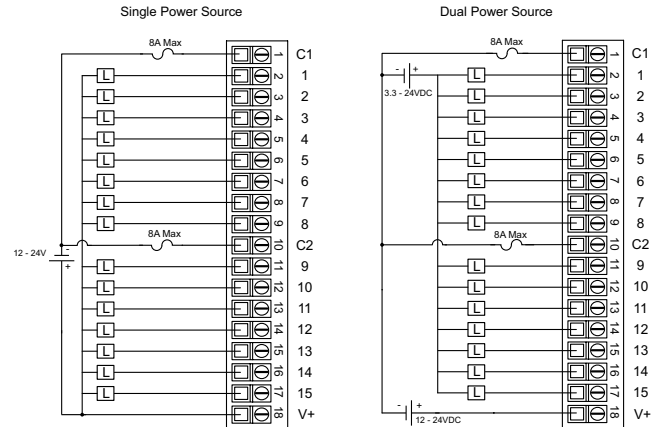
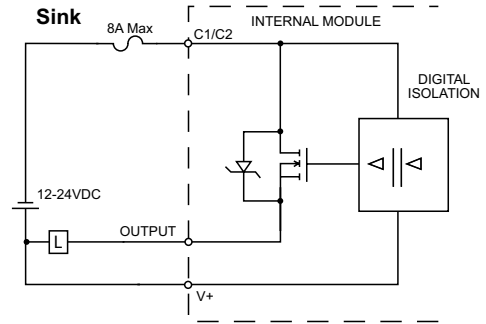
P2-RTB-1  
(Quantity 1)

### 5 Accessories<sup>2</sup>



ZL-RTB-COM  
TW-SD-SL-1  
TW-SD-MSL-1

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



**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 .

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### Terminal Block Specifications

Part Number	P2-RTB	P2-RTB-1
<b>Positions</b>	18 Screw Terminals	18 Spring Clamp Terminals
<b>Wire Range</b>	30–16 AWG (0.051–1.31 mm <sup>2</sup> ) 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 mm <sup>2</sup> ) Solid / Stranded Conductor 3/64 in (1.2 mm) Insulation Max. 19/64 in (7–8 mm) Strip Length
<b>Conductors</b>	*USE COPPER CONDUCTORS, 75°C* or equivalent.	
<b>Screw Driver</b>	0.1 in (2.5 mm) Maximum*	
<b>Screw Size</b>	M2	N/A
<b>Screw Torque</b>	2.5 lb-in (0.28 N-m)	N/A

\*Recommended Screw Driver TW-SD-MSL-1

### General Specifications

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

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