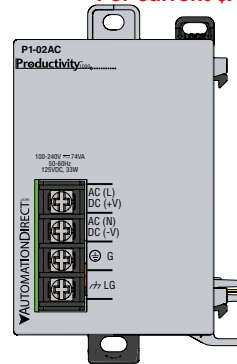


| User Specifications                                                           |                                                                      |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>Input Voltage Range (Tolerance)</b>                                        | 100–240 VAC (-15% / +10%)<br>125VDC (-15% / +20%)                    |
| <b>Rated Operating Frequency</b>                                              | 50–60 Hz with ±5% tolerance                                          |
| <b>Maximum Input Power</b>                                                    | 75VA (AC)<br>33W (DC)                                                |
| <b>Cold Start Inrush Current</b>                                              | 21A                                                                  |
| <b>Maximum Inrush Current (Hot Start)</b>                                     | 21A                                                                  |
| <b>Input Fuse Protection (Internal)</b>                                       | Micro fuse 250V, 2A<br>Non-replaceable                               |
| <b>Efficiency</b>                                                             | 81%                                                                  |
| <b>Output</b>                                                                 | 24VDC, 1.08 A                                                        |
| <b>Maximum Output Power</b>                                                   | 26W                                                                  |
| <b>Isolated User 24VDC Output</b>                                             | None                                                                 |
| <b>Output Protection for Over Current, Over Voltage, and Over Temperature</b> | Self resetting                                                       |
| <b>Under Input Voltage Lock-out</b>                                           | 40–75 VAC - 24VDC On @ 76.15 VAC<br>55–99 VDC - 24VDC On @ 100.2 VDC |
| <b>Input Transient Protection</b>                                             | Varistor, plus input choke and filter                                |
| <b>Operating Design Life</b>                                                  | 10 years at full load at 40°C ambient and<br>5 years at 60°C ambient |
| <b>Maximum Module Count</b>                                                   | Up to 15 modules                                                     |

Please note: \$US prices shown  
 For current \$AUD visit [www.directautomation.com.au](http://www.directautomation.com.au)

## P1-02AC Power Supply



The P1-02AC Universal Power Supply provides isolated power to the Productivity1000 system from an external 100–240 VAC or 125VDC source. This power supply will provide power for up to 15 P1 I/O modules.

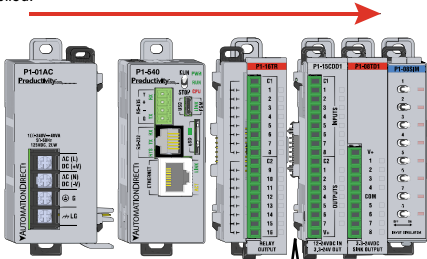
|                                               |   |
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| User Specifications . . . . .                 | 1 |
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| Warning . . . . .                             | 4 |
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| General Specifications . . . . .              | 4 |

Warranty: Thirty-day money-back guarantee. Two-year limited replacement (See [www.productivity1000.com](http://www.productivity1000.com) for details).

# Module Installation

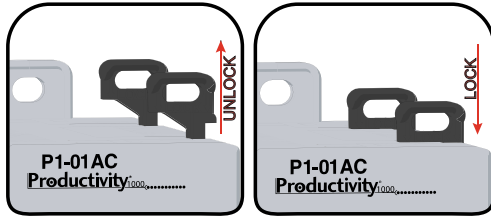
**WARNING:** Do not add or remove modules with field power applied.

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

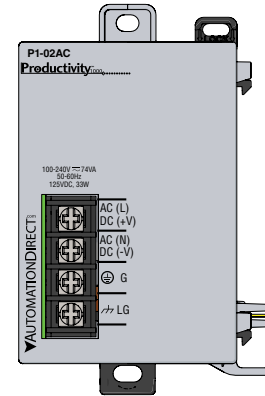


Check all latches are secure after modules are connected.

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

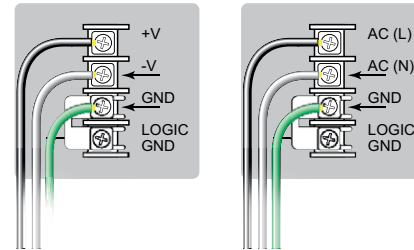


# Power Hookup



125VDC

100–240 VAC



## Grounding

A good common ground reference (earth ground) is essential for proper operation of the Productivity1000 system. One side of all control circuits, power circuits and the ground lead must be properly connected to earth ground by either installing a ground rod in close proximity to the enclosure or by connecting to the incoming power system ground. There must be a single-point ground (i.e. copper bus bar) for all devices in the enclosure that require an earth 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 770-844-4200.

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### Terminal Block Specifications

|                           |                                                                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Positions</b>          | 4 Screw Terminals                                                                                                                         |
| <b>Wire Range</b>         | 22–12 AWG (0.324–3.31 mm <sup>2</sup> )<br>Solid / Stranded Conductor<br>3/64 in (1.2 mm) Insulation Max.<br>1/4 in (6–7 mm) Strip Length |
| <b>Conductors</b>         | *USE COPPER CONDUCTORS, 75°C* or equivalent.                                                                                              |
| <b>Screw Driver Width</b> | 1/4 in (6.5 mm) Maximum*                                                                                                                  |
| <b>Screw Size</b>         | M3                                                                                                                                        |
| <b>Screw Torque</b>       | 7–9 lb·in (0.882–1.02 N·m)                                                                                                                |

\*Recommended Screw Driver TW-SD-MSL-2

### 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>Insulation Resistance</b>          | >10MΩ @ 500VDC                                                                                                                                                                |
| <b>Heat Dissipation</b>               | 6200mW                                                                                                                                                                        |
| <b>Enclosure Type</b>                 | Open Equipment                                                                                                                                                                |
| <b>Voltage Withstand (dielectric)</b> | 2100VDC applied for 2 seconds                                                                                                                                                 |
| <b>Module Location</b>                | Power Supply latches to CPU in the module stacking Productivity1000 System.                                                                                                   |
| <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>Weight</b>                         | 164g (5.8 oz)                                                                                                                                                                 |
| <b>Agency Approvals</b>               | UL 61010-1 and UL 61010-2-201 File E139594, Canada & USA<br>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      |
| P1-02AC-DS    | 2nd Edition      | 9/13/2019 |

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