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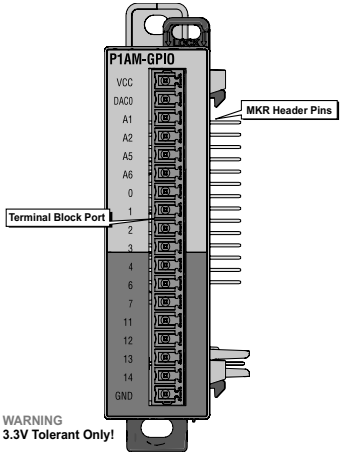
P1AM-GPIO Arduino® MKR Compatible Shield

The P1AM-GPIO is a housed Arduino MKR form factor shield that brings a subset of the MKR header pins out to the front 18 position terminal block. Most pins include basic electrical protection. It connects to the left side of the P1AM-100 CPU and most Arduino MKR form factor boards.



General Specifications	
Operating 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)
Heat Dissipation	475mW
Enclosure Type	Open Equipment
Module Location	Connects to the left side of the P1AM-100 CPU. P1-01AC/02AC can connect to the left side of shield or CPU.
Connector Type	Sold Separately
Weight	56g (2.0 oz)
Agency Approvals	UL 61010-1 and UL 61010-2-201 File E139594, Canada & USA CE*

*See CE Declaration of Conformance for details.

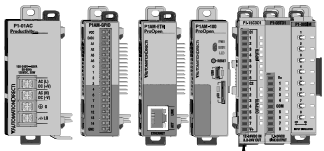
Link to GitHub

Link to full additional resources

Module Installation

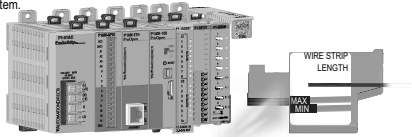
WARNING: Do not add or remove modules with field power applied.

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

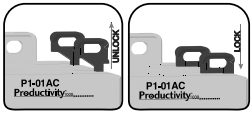


Check all latches are secure after modules are connected.

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



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



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.

This device is not intended for personnel, product, or machine safety applications.

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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

Document Name	Edition/Revision	Date
P1AM-GPIO-DS	1st Edition	10/30/2019