

Shields

P1AM-ETH

\$55.00

Ethernet Communications Shield

The P1AM-ETH is a housed Arduino Compatible Ethernet Shield based on the Wiznet W5500 Ethernet Controller. It interfaces to the left side

of the P1AM-100 CPU and most Arduino MKR form factor shields.



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	750mW
Enclosure Type	Open Equipment
Power Budget	150mA/5V
Recommended Library	Arduino Ethernet
Module Location	Connects to the left side of the P1AM-100 CPU.
Weight	20g (0.8 oz.)
Agency Approvals	UL 61010-1 and UL 61010-2-201 File E139594, Canada & USA CE

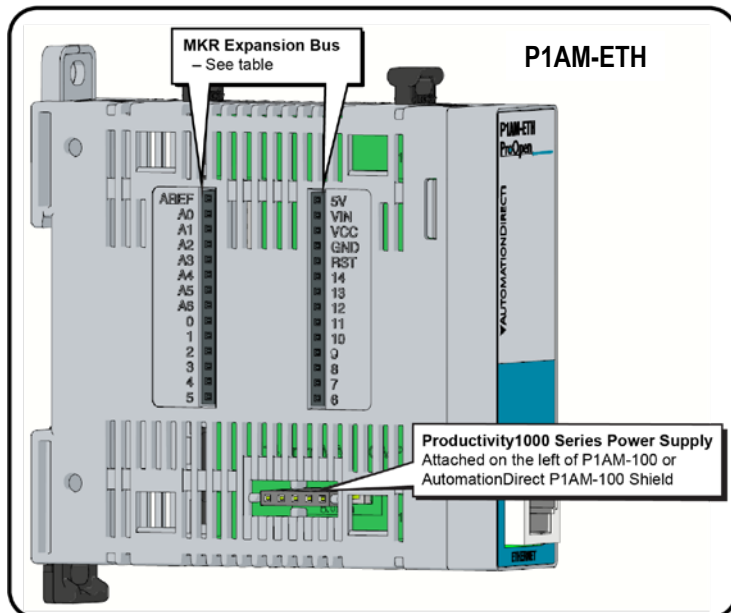
Ethernet Features

Supports Hardwired TCP Protocols:

- TCP, UDP, ICMP, IPV4, ARP, IGMP, PPPOE
- Supports 8 independent sockets simultaneously
- Supports Power Down Mode
- Supports Wake on LAN over UDP
- Supports High Speed Serial Peripheral Interface (SPI MODE 0, 3)
- Internal 32K bytes of Memory for TX/RX Buffers
- 10BaseT / 100BaseTX Ethernet PHY embedded
- Supports Auto Negotiation (Full and Half Duplex, 10 and 100-based)
- Does Not Support IP Fragmentation
- 3.3 V operation with 5V I/O signal tolerance
- LED outputs (Full / Half duplex, Link, Speed, Active)

!WARNING!

Do not add or remove modules with field power applied!



MKR Expansion Bus Pins

GPIO	A0-A6, 0-14
Analog Input Pins	A0-A6
Analog Output Pins	A0
PWM Pins	0-8, 10, A3, A4
Interrupt Pins	0, 1, 4-8, A1, A2
5V	5V supply output
Vin	5V regulated supply
VCC	3.3 V supply output
GND	Ground
RST	Reset
AREF	Analog Input Reference

Critical Notes:

Pins A3, A4, and 8-10 are used for the base controller.
Do not exceed 46mA combined from pins 0, 1, and 4-10.
Do not exceed 3.3 V on any I/O pin.
Do not exceed 7mA on any I/O pin.
Do not apply power to 5V or VCC

Header Pins Used for Ethernet Shield

Pins Used	Function	Description
5	ETH SS	
8	MOSI	
9	SCK	SPI pins are shared with other devices on SPI bus
10	MISO	