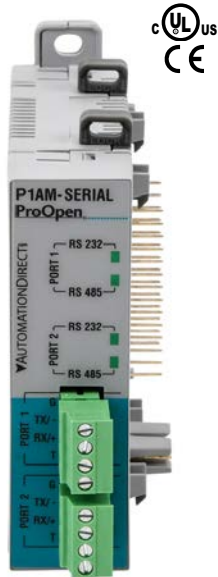


Shields

P1AM-SERIAL \$55.00

Serial Communications Shield

The P1AM-SERIAL is a housed Arduino MKR form factor shield. It connects to the left side of the [P1AM-100](#) CPU and most Arduino MKR form factor boards.



!WARNING!
Do not add or remove
modules with field
power applied!

Serial Features

- Supports RS-232 and RS-485
- RS232/RS485 selectable in program
- Status LEDs (RS-232/RS485 mode selection, TX and RX activity)

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)
Altitude	2000 meters max.
Pollution Degree	2
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2-6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Heat Dissipation	380mW
Overvoltage Category	II
Voltage Withstand (dielectric)	Non-isolated
Insulation Resistance	Non-isolated
Enclosure Type	Open equipment
Power Budget	115mA/3.3 V
Recommended Library	P1AM_Serial
Module Location	Connects to the left side of the P1AM-100 CPU. P1-01AC, P1-02AC, and P1-01DC can connect to the left side of the Shield.
Weight	77g (2.7 oz.)
Agency Approvals	UL 61010-1 and UL 61010-2-201 File E139594, Canada & USA CE

Header Pins Used for Serial Shield

Pins Used	Function	Description
3	P1 Mode	Port 1 Mode (Low=RS485 High=RS232)
14	P1 TX-	Port 1 Data -
13	P1 RX+	Port 1 Data +
A6	P1 DE/RE	Port 1 Driver Enable / Receiver Enable
2	P2 Mode	Port 2 Mode (Low=RS485, High=RS232)
0	P2 TX-	Port 2 Data -
1	P2 RX+	Port 2 Data +
6	P2 DE/RE	Port 2 Driver Enable / Receiver Enable

Note: If a P1AM-GPIO module is installed alongside a P1AM-SERIAL module, the above pins will be unavailable to the P1AM-GPIO.