

UNO-220-P4N2AE

Industrial Raspberry Pi 4 HAT Gateway Kit with POE function, TPM, 1 x RS-232/485, 8 x GPIO, 8 GB SD Card, and AdvRaspbian OS

NEW



CE FCC

Features

- Protect your Raspberry Pi device from dust and temperature extremes.
- Industrial-grade gateway kit provides Raspberry Pi-ready solutions for rapid prototyping
- Industrial grade I/O board for RS-232/485 and GPIO extension
- Integrated with PoE function allows users to power Raspberry Pi4 via an Ethernet cable
- Battery-backed RTC enabling fail-safe time keeping
- Built-in TPM function provides robust protection for critical data
- Included OS enables RPi identification of UNO-220, and automatically configures GPIOs and drivers for the board
- Supports wall-mount and DIN rail installation for industrial applications
- LED indicator for more easier mentenance

Introduction

UNO-220 is designed for customers using Raspberry Pi 4 (RPi 4) single-board computers (SBCs) in IoT applications. Featuring a system-image OS equipped micro SD card, an RPi 4 HAT I/O board, additional RS-232/485 GPIOs, and an RTC battery backup for precise time keeping; the UNO-220 industrial-grade chassis transforms RPi 4 into a more ruggedized gateway ideal for rapid prototyping in shop floor environment.

Specifications

General

- **Certification** CE, FCC
- **Dimensions (W x D x H)** 100 x 70 x 40 mm
- **Form Factor** Micro
- **Enclosure** Aluminum housing
- **Mount Options** Wall mount, DIN rail (optional)
- **Weight (Net)** 0.5 kg (1.10 lbs)
- **Power Input** 5V_{DC} via USB-C connector @ 3.0A (Minimum) or IEEE 802.3at PoE-PD (Leverage with Raspberry Pi 4 Gigabit LAN)
- **Power Consumption** 15 W (typical)
- **OS Support** AdvRaspbian

System Hardware

- **Watchdog Timer** Programmable 255 level timer interval (1 ~ 255 sec.)
- **Hardware Security** TPM 2.0

I/O Interfaces

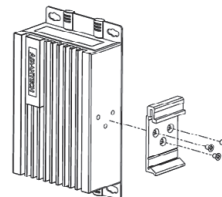
- **Serial Ports** 1 x RS232/485 (5-pin terminal block), automatic direction control, 300 ~ 115.2k bps
- **GPIO** GPI 0-7: VIH: 2 ~ 5V
VIL: 0 ~ 0.8V
GPO 0-7: 0 ~ 5V

Environment

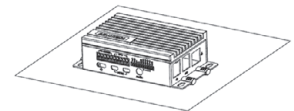
- **Operating Temperature** 0 ~ 50 °C (32 ~ 122 °F) @ 5 ~ 85% RH without 0.7m/s airflow
- **Storage Temperature** -20 ~ 60 °C (-4 ~ 140 °F)
- **Relative Humidity** 10 ~ 95% RH @ 40 °C, non-condensing
- **Ingress Protection** IP40

Installation Scenario

DIN-Rail Mount Illustration



Stand Mount Illustration



Ordering Information

- **UNO-220-P4N1AE** Industrial Raspberry Pi gateway kit with 1 x RS-232/485, 4 x GPIO, 8 GB SD card, and Raspbian OS
- **UNO-220-P4N2AE** Industrial Raspberry Pi 4 Gateway Kit with POE function, TPM, 1 x RS-232/485, 8 x GPIO, 8 GB SD Card, and AdvRaspbian OS
- **UNO220P4N22101-T** UNO-220-P4N2AE without SD card, Quick LT

Optional Accessories

- **UNO-200-DMKAE** Optional DIN-rail kit

Adapter and power cord

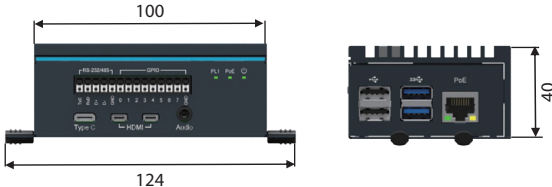
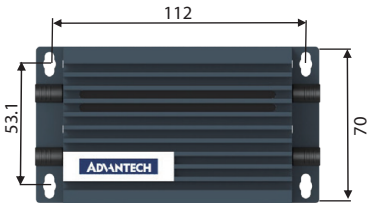
- **XUNO-FSP015-DPAN3** 15W 5V USB-Type C connector
- **1702002600** Power cable, US plug, 1.8 m (industrial grade)
- **1702002605** Power cable, EU plug, 1.8 m (industrial grade)
- **1702031801** Power cable, UK plug, 1.8 m (industrial grade)
- **1700000596** Power cable, China/Australia plug, 1.8 m (industrial grade)

Packing List

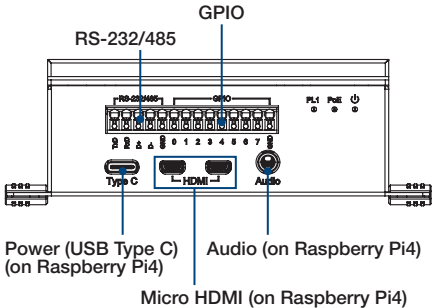
- **96FMSD-8G-CM-AT** 8GB SD card with AdvRaspbian OS

Dimensions

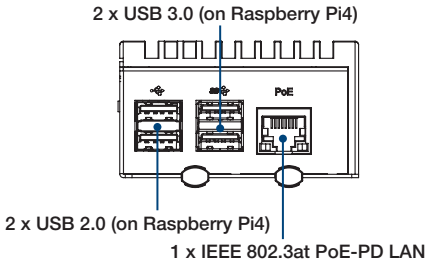
Unit: mm



Front I/O View



Side I/O View



Raspberry Pi4 Installation Guide

