# **UNO-220**

## Industrial Raspberry Pi 4 HAT Gateway Kit



#### **Features**

- Industrial-grade power and I/O gateway kit installed with Raspbian OS provides RPi 4 -ready solutions for rapid prototyping
- UNO-220 industrial-grade chassis transforms RPi 4 into a ruggedized gateway for shopfloor environments
- An power and industrial I/O board for RS-232/485 and GPIO extension
- Amazon AWS IoT Greengrass certified





## Introduction

UNO-220 is a power and I/O board designed for end users using Raspberry Pi 4 (RPi 4) single-board computers (SBCs) in unique IoT applications. Featuring a system-image OS equipped micro 8GB SD card, an RPi 4 HAT I/O board, additional RS-232/485 GPIOs, and an RTC battery backup for precise time keeping; UNO-220 industrial-grade chassis transforms RPi 4 into an intelligent gateway. UNO-220 also features pre-finished mounting holes and attachment screws enabling plug-and-play assembly with separately purchased RPi 4 SBCs. It provides developers with a complete RPi 4-ready industrial-grade gateway kit, which is ideal for rapid prototyping and mass deployment

## **Specifications**

#### General

Certification CE, FCC

Dimensions (W x D x H) 100 x 70 x 32 mm (3.9 x 2.7 x 1.2 in)

Form Factor

Enclosure Aluminum housing

Mount Options Wall mount, DIN rail (optional)

0.5 kg (1.10 lbs) Weight (Net) - Power Consumption 15 W (typical) OS Support AdvRaspbian

#### **System Hardware**

 Hardware Security TPM 2.0 (available upon request)

1 x Micro SD slot Storage

internal 8 GB SD card included, which can be swapped

and inserted into Raspberry Pi 4.

I/O Interfaces

Serial Ports 1 x RS232/485 (5-pin terminal block), automatic

direction control, 300 ~ 115.2k bps

GPI 0-3: VIH: 2 ~ 5V GPI0

VIL: 0 ~ 0.8V

GPO 0-3: 0 ~ 5V

#### **Environment**

• Operating Temperature  $0 \sim 50 \, ^{\circ}\text{C} \, (32 \sim 122 \, ^{\circ}\text{F}) \, @ \, 5 \sim 85\% \, \text{RH}$  without 0.7m/s airflow

 Storage Temperature 20 ~ 60 °C (-4 ~ 140 °F)

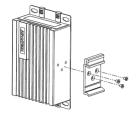
 $10 \sim 95\%$  RH @ 40 °C, non-condensing Relative Humidity

Ingress Protection

## 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 AdvRaspbian 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

## **Optional Accessories**

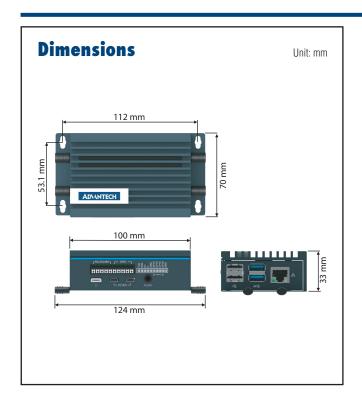
 UNO-200-DMKAE Optional DIN-rail kit

## Adapter and power cord

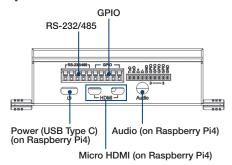
**XUNO-FSP015-DPAN3** 15W 5V USB-Type C connector

**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

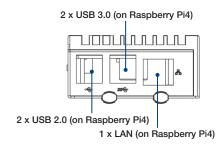
grade)



## Front I/O View



## Side I/O View



# **Raspberry Pi4 Installation Guide**

