

# UNO-220

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

NEW



CE FCC

## Features

- Automation kit featuring an industrial-grade I/O board for creating RPi-based IoT systems
- Industrial grade I/O board utilizing RS-232/485 and GPIO for flexible expansion
- Battery-backed RTC enabling fail-safe time keeping
- Included OS enables RPi identification of UNO-220, and automatically configures GPIOs and drivers for the board
- Easy 4-step RPi 4 installation
- Supports wall-mount and DIN rail installation for industrial applications
- Supports TPM hardware security upon request

## Introduction

UNO-220 is designed for customers using Raspberry Pi (RPi) single-board computers (SBCs) in unique 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 an intelligent gateway. UNO-220 features pre-finished mounting holes and attachment screws enabling plug-and-play assembly with separately purchased RPi 4 SBCs. This system provides developers with a complete RPi-ready industrial-grade gateway kit 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** Micro
- Enclosure** Aluminum housing
- Mount Options** Wall mount, DIN rail (optional)
- Weight (Net)** 0.5 kg (1.10 lbs)
- 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 (available upon request)
- Storage** 1 x Micro SD slot (dummy)  
(internal 8 GB SD card interchangeable with Raspberry Pi 4)

### I/O Interfaces

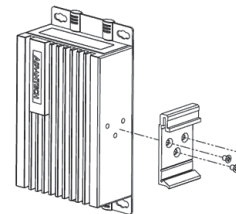
- Serial Ports** 1 x RS232/485 (5-pin terminal block), automatic direction control, 300 ~ 115.2k bps
- GPIO** GPI 0-3: VIH: 2 ~ 5V  
VIL: 0 ~ 0.8V  
GPO 0-3: 0 ~ 5V

### Environment

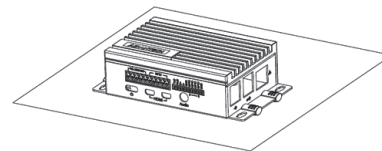
- Operating Temperature** 0 ~ 50 °C (32 ~ 122 °F) @ 5 ~ 85% RH without 0.7m/s airflow
- Storage Temperature** 20 ~ 60 °C (-4 ~ 140 °F)
- Relative Humidity** 10 ~ 95% RH @ 40 °C, non-condensing
- Ingress Protection** IP40

## Installation Scenario

### DIN-Rail Mount Illustration



### Stand Mount Illustration



## Ordering Information

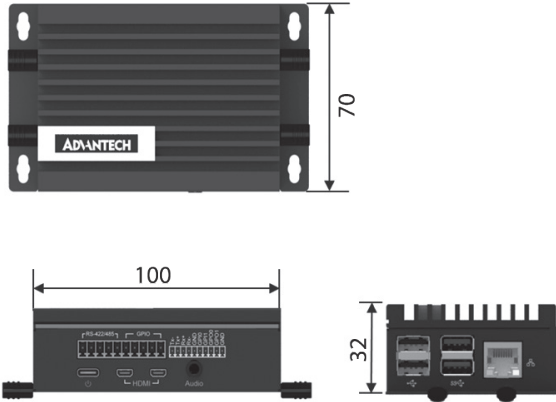
- UNO-220-P4N1AE** Industrial Raspberry Pi gateway kit with 1 x RS-232/485, 4 x GPIO, 8 GB SD card, and Raspbian OS

## Optional Accessories

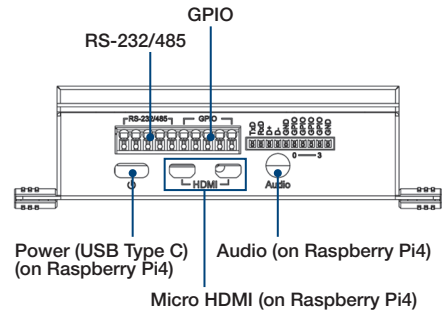
- UNO-2000G-DMKAE** UNO-2000 DIN-rail kit

## Dimensions

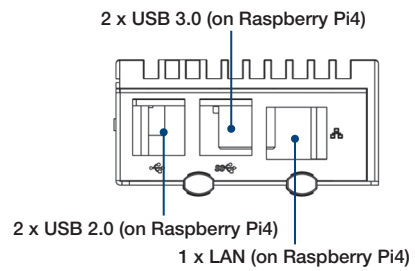
Unit: mm



## Front I/O View



## Side I/O View



## Raspberry Pi4 Installation Guide

