



MA1

Industrial Edge AI Computer Powered by NVIDIA Jetson Orin NX & Nano SOM

Introduction

- NVIDIA® Jetson Orin™ Nano and NX SOM Compatible Box PC, Up to 100TOPS/25W
- Industrial Fanless & Compact Design
- Wide Operating Temperature -25~60°C
- HDMI up to 4K@60Hz Resolution
- 2x RJ-45 1GbE LAN
- 2x USB3.2 Gen2 Type A
- 1x D-Sub9 RS-232 (4-wire)
- High-speed M.2 2280 PCIe x4 NVMe
- Support 5G/LTE and WiFi-6E

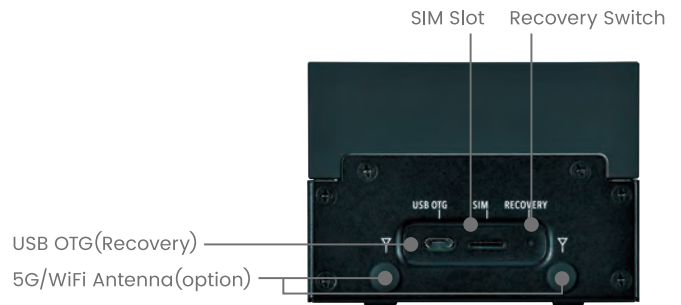


I/O Interface

Front I/O



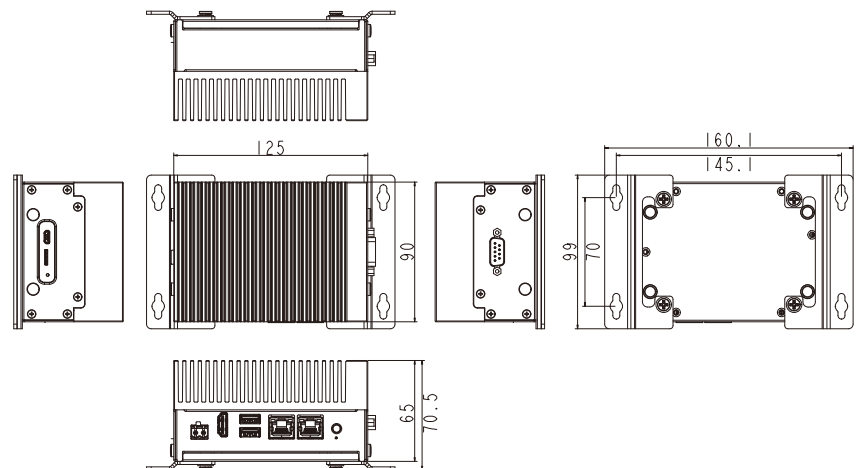
Side I/O



Side I/O



Dimension (mm)



MA1 Fanless Embedded System

SYSTEM	
NVIDIA® Jetson Orin™ Compatible Module	NVIDIA® Jetson Orin™ Nano 4GB Module (7~10W) NVIDIA® Jetson Orin™ Nano 8GB Module (7~15W) NVIDIA® Jetson Orin™ NX 8GB Module (10~20W) NVIDIA® Jetson Orin™ NX 16GB Module (10~25W)
Display Interface	1 x HDMI 2.0 Type A, Up to 3840 x 2160 at 60 Hz Resolution
Storage Slot	1 x M.2 2280 M-Key Slot (PCIe x4 for NVMe)
Expansion Slot	1 x M.2 3042/3052 B-Key Slot (USB3.2) for 5G/LTE Module 1 x M.2 2230 E-Key Slot (PCIe/USB2.0) for WiFi Module 1 x Nano-SIM Slot
Front I/O	2 x USB 3.2 Gen 2 Type A 1 x USB2.0 MicroUSB OTG with Recovery Button (for Recovery Mode Only)
Rear I/O	2 x 1GbE RJ-45 / 1 x RS-232 DB9 (4-wire)
POWER REQUIREMENT	
Power Input	12V DC Input
Power Adapter	60W AC-DC Power Adapter with 2-PIN Terminal Block
MECHANICAL	
Thermal Design	Fanless
Dimensions (W X D X H)	90 x 125 x 65 mm
ENVIRONMENTAL	
Operating Temperature	-25°C ~ 60°C
Operating Humidity	10% ~ 95% R/H (Non-condensing)
Certification	CE / FCC Class B
OS	
OS Support	NVIDIA JetPack 5.1.1 (Ubuntu 20.04 with Linux Kernel 5.10 LTS)

Packing List

Packing			
• 1 x MA1	• 1 x AC-DC Power Adapter with 2-Pin Terminal Block	• 1 x Power Cord	• 1 x MicroUSB cable

Rugged

Fanless

Fanned

Rackmount