



Features

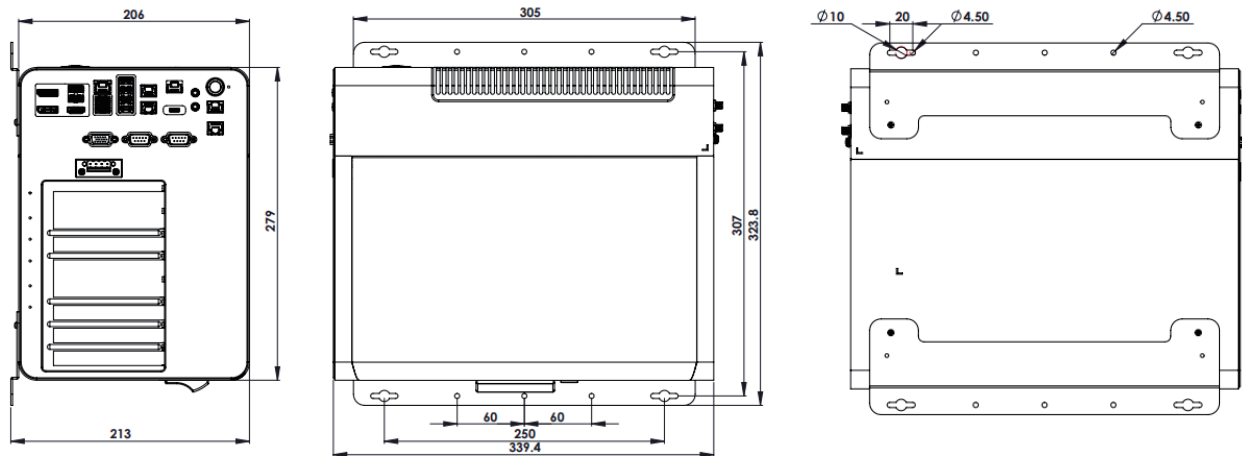
- NCS (NVIDIA-Certified System) certification, featuring NVIDIA RTX 6000Ada GPU.
- Specialized Thermal design to support Dual Qualcomm Cloud AI100 Ultra for localized AI Inference
- Drive breakthrough AOI AI defect inspection with Metropolis for Factories.
- Support out-of-band (OOB) management for remote maintenance of edge devices

Specifications

Model Number	AIP-FR68-A1
CPU	12/13 th Gen. Intel® Core™ i9/i7/i5 Processor up to 65W
Graphics	Intel® UHD Graphics 770
Chipset	Intel® R680E Chipset
System Memory	4 x DDR5 288-pin U-DIMM up to 192G
Storage	4 x 2.5" SATAIII SSD (RAID 0/1/5/10) 1 x M.2 M-Key Slot, Support PCIe Gen4 x4 for NVME/SATA, Size 2280 1 x M.2 M-Key Slot, Support PCIe Gen4 x4 for NVME, Size 2280 (NVMe Gen 4 available to support dual M.2 AI accelerator)
USB	8 x USB 3.2 Gen2 x 1 (Type-A) 1 x USB 3.2 Gen2 x 2 (Type-C)
LAN	3 x 2.5G RJ-45 Ethernet (I226-LM, LAN2/LAN3 optional with 802.3at PSE up to 30W/ch) 1 x 10G BASE-T RJ-45 (Marvell AQC113)
Serial port	1 x RS-485 (COM3, RJ45) 2 x RS-232/422/485 (COM1/2, DB9, Default RS-232)
Display	1 x HDMI 2.0 2 x DP++ 1.4 (VGA optional / GPIO either one)
Expansion Slots	1x M.2 E-Key 2230 (USB2.0/PCIe) 1x M.2 B-Key 3052(USB2.0/USB3.2) 1x PCIe Gen4 x16 or Gen4 x8 (PCIe x16 slot) 1x PCIe Gen4 x8 (PCIe x16 slot) 1x PCIe Gen3 x4 (PCIe x4 slot) 1x PCIe Gen3 x4 (PCIe x16 slot) 1x PCIe Gen3 x1 (PCIe x1 slot)
SIM Slot	1 x Nano SIM slot
GPIO	8 x bits GPIO
Audio	1 x Line-out, 1 x Mic-in
Button	1 x Power button 1 x AI button
Indicator	PCIe Slot-1&2 (POWER/FAN/TEMP)
MISC. Function	OOB (out of band), Built-in Innodisk – InnoAgent
Power Consumption	Full loading : up to 600 Watts
Power Input /Connector	DC-in 24~48V (Power input up to 600W) , 4-pin Terminal Block
Dimension (Wx Dx H)	340 x 215 x 279 mm
GPU Card support Dimension (Hx Wx D)	Based on NVFF5.0 112 x 269 x 39 mm (for Dual slots card) 112 x 244 x 19 mm (for Single Slot card)
Mounting	Wall mount / Desk mount
Net Weight	11 kg
Vibration	1Grms ,IEC60068-2-64,Random,5 ~ 500 Hz ,1Hr / Axis (operation, w/o PCIe Card)
Shock	10G, IEC 60068-2-27, Half Sine, 11 ms Duration (operation, w/o PCIe Card)
Temperature	Operating Temp.: 0°C ~ +50°C (32°F ~ 122°F)(w/o GPU) Operating Temp.: 0°C ~ +50°C (32°F ~ 122°F)(w/ 165W Passive GPU) Operating Temp.: 0°C ~ +40°C (32°F ~ 104°F)(w/ 300W Active GPU) Storage Temp.: -40°C ~ +85°C (- 40°F ~ 185°F)
Humidity	95% @ 40°C Related Humidity, Non-condensing
OS Support	Windows 10 IOT LTSC / Windows 11 / Ubuntu 22.04
Security	TPM 2.0
Certification	CE / FCC Class A / UKCA / LVD / RoHS

PCIe Series AIP-FR68-A1

System & Mounting Dimension



I/O Layout



Ordering Information

Model name	Description
AIP-FR68-A1	AIP-FR68-A1 Bare system (w/o CPU, RAM, SSD, GPU card, Power Supply)

Accessory (Optional)

Model	Part No.	Description
MW:HEP-600-24	53-0F0000-0009	(HF) 88~264V 600W DC 20.4~25.2V 25A -40~70°C
AC Power cable	3102000029N000	3P SL4 TO 3P RING TERMINAL 4.3 SVT 18AWG/3C 300mm
DC Power cable	3102000030N000	RVL2-4 ID:4.3mm TO 2ESDFM-04P UL1007#16 1000mm

GPU Card (Optional)

Model	Part No.	Description
NVIDIA RTX 6000 ADA 48GB	91-02600A-0000	(HF) RTX 6000 ADA PCIE4.0 16X 48GB GDDR6 ACTIVE 300W
RTX 4070TI SUPER INDUSTRIAL	91-02N712-0000	(HF) RTX 4070TI SUPER PCIE4.0 16X 16GB GDDR6X ACTIVE 2SLOT 285W 0~55°C
QUALCOMM CLOUD AI100 ULTRA	91-02QUAL-0000	(HF) QUALCOMM AI 100 ULTRA, PCIE4.0 16X, 128G LPDDR4X, PASSIVE 150W, PCIE FH3/4L.