Ouster, Inc.
350 Treat Ave.
San Francisco, CA 94110

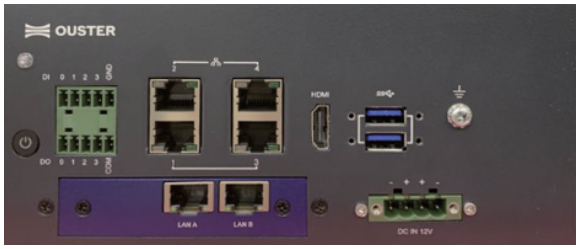
Catalyst GPU Edge Computer

NEMA TS2 AI Inference System Based on Nvidia Jetson AGX Orin

HARDWARE VERSION: Rev 01

SUMMARY

Ouster Catalyst GPU (the edge computer) provides compact fanless processing resources required to process lidar data, generate object metadata, and implement logic to exchange data with external systems.



HIGHLIGHTS

- CPU NVIDIA 8-core ARM Cortex
- 1024-core NVIDIA Ampere™ GPU
- Storage 64GB eMMC and 128G NVMe
- Built-in PoE injector with 6kv surge protection
- NEMA TS2 Certification (TS2-2021 section 2.2.7, 2.2.8, and 2.2.9)

PROCESSOR

NVIDIA Jetson Series	
CPU	8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU, 2MB L2 + 4MB L3
GPU	1792-core NVIDIA Ampere GPU with 56 Tensor Cores, Maximum Operating Frequency: 930 MHz
Memory	32GB 256-bit LPDDR5 DRAM

INTERFACE

Ethernet	4 x 10/100/1000 Mbps - Support 4 x Gigabit PoE/2 Gigabit PoE+ with 60W power budget 2 x 10/100/1000 Mbps - Non-PoE Gigabit
Storage	128G M.2 2280 M-Key industrial grade NVMe SSD (-40~85°C)
Power	12 VDC (With external 240W Adapter) (pre-configured with hardened power adaptor/power core)

OPERATIONAL

Operating Temperature	-34°C to +74°C with 0.7 m/s airflow (30W AGX Orin mode)
Storage Temperature	-40°C to +85°C
Operating Humidity	95% @ 40 °C (non-condensing)
Vibration	3Grms @ 5 ~ 500 Hz, random, 1 hr/axis
Shock	10G / 11 ms
Power Interruptions	500 ms Power Interruptions
Endurance	5 Hz to 30 Hz 0.5 g in x, y and z axes
	All parts are made of corrosion-resistant materials, such as UV stabilized or UV resistant plastic, stainless steel, anodized aluminum, brass, or gold-plated metal. Type 304 or 316 passivated stainless steel

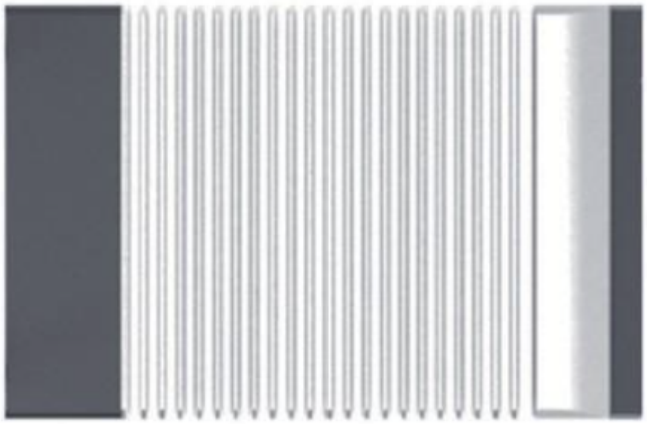
Compliance	NEMA-TS2 section 2.2.7, 2.2.8, and 2.2.9 FCC 47CFR Part 15, Subpart B, Class A ICES-03 EU: • EN 55032:2012/AC 2013; CISPR 32:2015 • EN 55024:2010; CISPR 24:2010 • EN 61000-3-2:2014 • EN 61000-3-3:2013 Product Safety: • UL 62368-1 3rd edition • IEC 62368-1:2018 UK CA Ouster UK (Ltd): 125 Princes Street, Edinburgh EH2 4AD, Scotland, United Kingdom Contact: Neil Calder, Phone Number: +44(0).131.563.9078

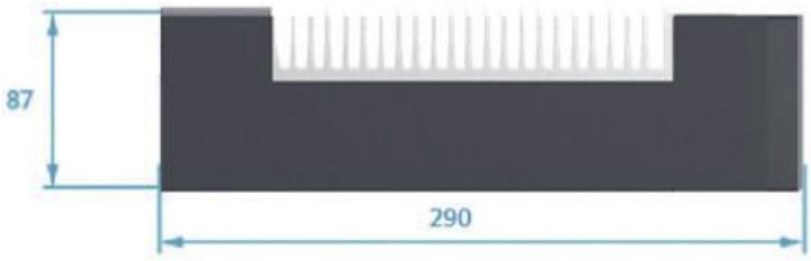
MECHANICAL

Dimensions (W x D x H)	192 x 290 x 87 mm
Weight	4.5 kg (9.9 lb)
Installation	Desktop / Wall mount
Material	All parts are made of corrosion-resistant materials, such as UV stabilized or UV resistant plastic, stainless steel, anodized aluminum, brass, or gold-plated metal. Type 304 or 316 passivated stainless steel

EXTERIOR DIMENSIONS

(Unit: mm)





*Specifications are subject to change without notice.

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