



# ROC200-DL

## SFF Rugged GPU Computer



### Key Features

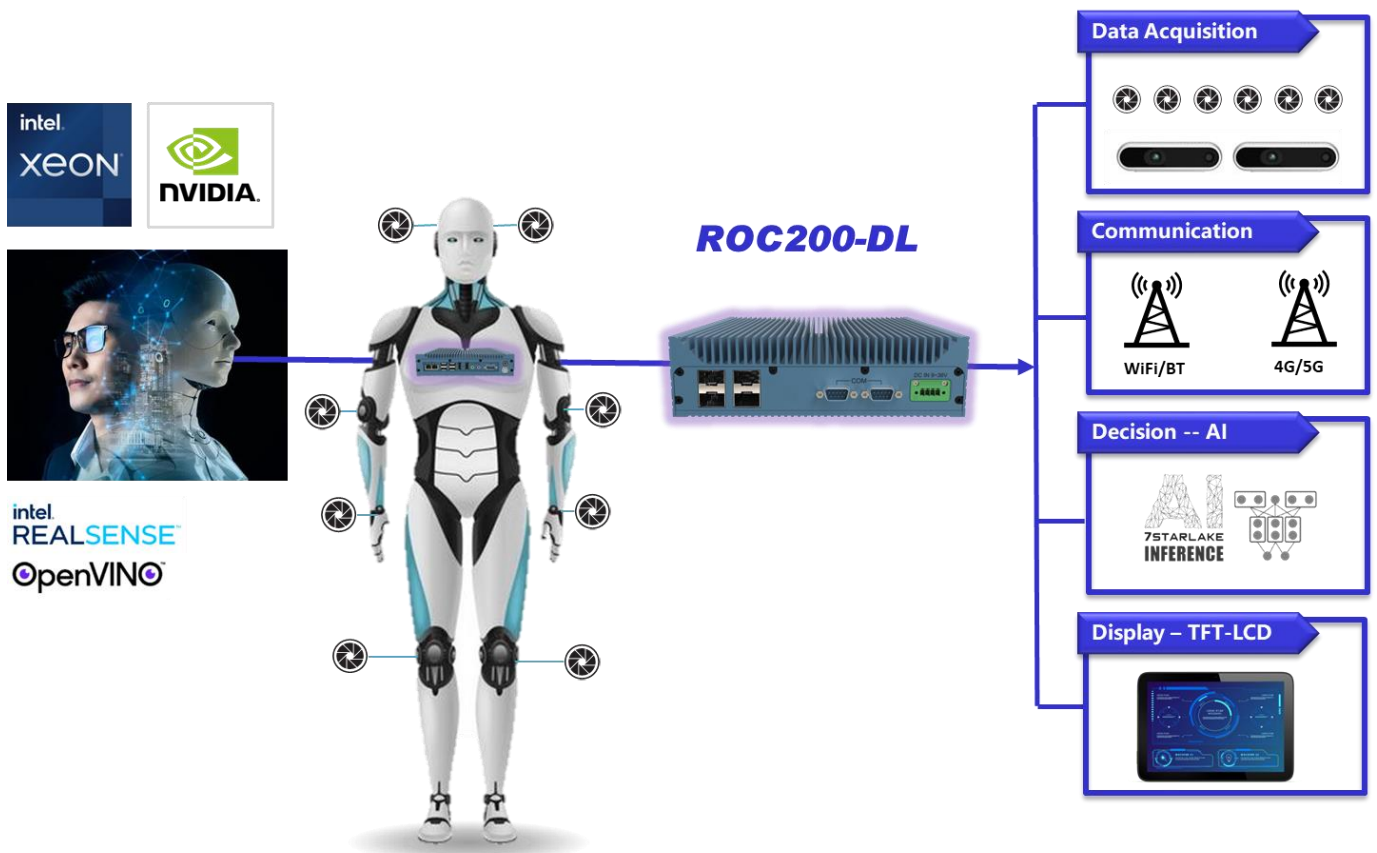
- MIL-STD 810 Thermal, Shock, Vibration, Humidity
- Intel® Xeon® Ice Lake-D LCC, D-1746TER, D-1732TE processor
- Nvidia MXM 5000Ada (9728 CUDA, 16GB GDDR6)
- Nvidia MXM 3500Ada (5120 CUDA, 12GB GDDR6)
- Up to 128GB DDR4 SO-DIMM
- COM Express Type 7 with MXM-GPU Expansions
- Extreme Temperature Support -20°C to 50°C
- 9V~36V DC-IN



# Introduction

Unleashing the future of Intel Xeon-D LCC Robotics, the ROC200-DL goes beyond the ordinary, mastering the art of identifying, mapping, and resolving real-world scenarios with a human-like touch.

Fueled by the sheer prowess of the Intel® Xeon® D-1700 processor (Ice Lake-D LCC), Nvidia Quadro MXM 5000 Ada or RTX MXM A4500 Graphic( 9728/5888 CUDA Cores), ROC200-DL isn't just an AI server – it's a Pint-sized powerhouse of dynamic sensor fusion marvel. Built on the robust foundation of Intel hardware, this solution rides the cutting edge with OpenVINO and REALSENSE technology, creating a symphony of innovation. Intel's open-source software-defined platform propels the ROC200-DL to not only perceive its surroundings with unparalleled efficiency but also respond in real-time to the dynamic demands of the modern landscape. With AI workloads meticulously optimized, the ROC200-DL is your gateway to a future where responsiveness meets intelligence, seamlessly shaping the landscape of innovation.



# Specifications

## Processor & System

COM Express CPU (Type 7)	Intel® Xeon® D-1700 processor (Ice Lake-D LCC)
COM Express CPU Options (Type 7)	Intel® Xeon® D-1700 processor (Ice Lake-D LCC) <ul style="list-style-type: none"><li>• Xeon® D-1746TER 2.0/3.1GHz, 15MB, 67W, 10C</li><li>• Xeon® D-1732TE 1.9/3.0GHz, 15MB, 52W, 8C</li><li>• Xeon® D-1715TER 2.4/3.5GHz, 10MB, 50W, 4C</li></ul>
GPU Module Options	NVIDIA® Quadro® 5000Ada, 115W, 16GB GDDR6, 9728 CUDA Cores NVIDIA® Quadro® MXM A4500, 80/115W, 16GB GDDR6, 5888 CUDA Cores NVIDIA® Quadro® 3500Ada, 115W, 12GB GDDR6, 5120 CUDA Cores NVIDIA® Quadro® MXM A2000, 60W, 8GB GDDR6, 2560 CUDA Cores
Memory type	DDR4, up to 128GB
Chipset	Base On CPU module
Watchdog	Base On CPU module

## Display

Internal Display Port	1x Display Port outputs from MXM GPU
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## Ethernet

10GbE SFP+	4x (Intel C827 10G Retimer)
RJ45 GbE LAN	2x 1GbE(one from CPU module, One from I210IT)

## Storage

M.2	1x M.2 2280 M-Key Slot (PCIe x4 GEN3, NVMe)
Swappable SSD	1x 2.5" SATA III Swappable tray

## Rear I/O

10GbE SFP+	4x
Swappable SSD Tray	1x 2.5" SATA III Swappable tray
COM	2x RS232

## Front I/O

LED	1x SSD LED
Power button	1x
USB	2x USB3.0
Display port	1x DP
LAN	2x J45
DC-IN	1x D38999 connector

## Power Management

Power Type	Wide Voltage DC-IN 9V~36V (Support AT/ATX mode)
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## Applications, Operating System

Applications	Energy/Power Plant Management, Intelligent Automation and manufacturing applications
Operating System	Win10, Win server 2012 R2 Standard

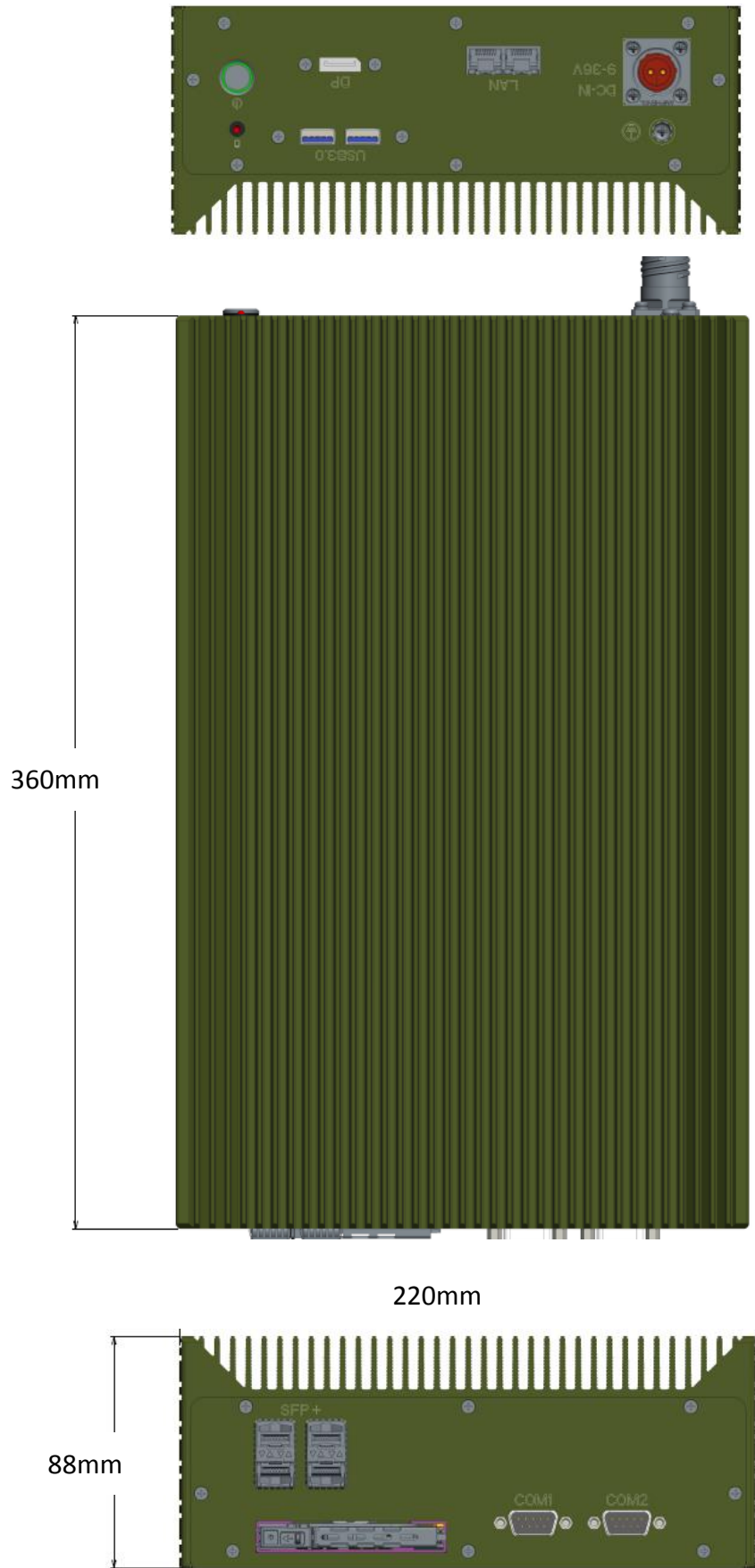
## Mechanical and Environmental

Dimension	250 x 350 x 88mm
Weight	TBC
Chassis	Aluminum Alloy
Heatsink	Aluminum Alloy, Corrosion Resistant
Finish	Anodic aluminum oxide
Compliance	MIL-STD-810G, IEC-61850-3, IEEE-1613, CE and FCC, RoHS
Operating Temp.	- 20°C to 50°C
Storage Temp.	-40°C to 85°C
Relative Humidity	5% to 95%, non-condensing

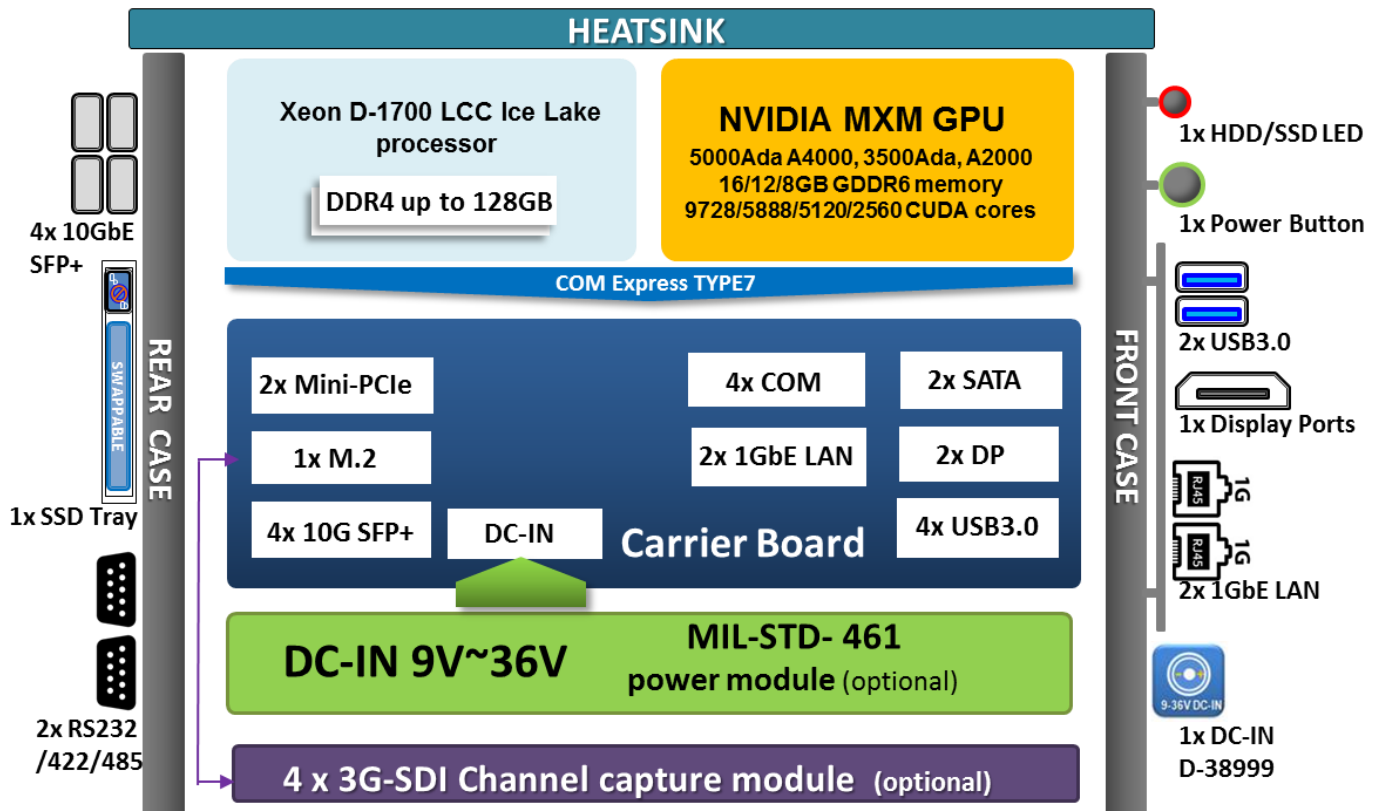
# Appearance



# Dimension



# Block Diagram



# Ordering Information

	ROC200-DL-A20	ROC200-DL-35A	ROC200-DL-A45	ROC200-DL-50A	ROC200-DL-R	ROC200-DL-4S
<b>CPU</b>	Xeon-D-1732TE, 8C	Xeon D-1746TER, 10C	Xeon D-1746TER, 10C	Xeon D-1746TER, 10C	Xeon-D-1732TE, 8C	Xeon D-1746TER, 10C
<b>GPU</b>	MXM A2000	MXM 3500Ada	MXM A4500	MXM 5000Ada	MXM A2000	MXM A3500Ada
<b>RAM</b>	DDR4 up to 128GB SO-DIMM					
<b>Storage</b>	1x M.2 2280 M-key, 2x SATA SSD			2x SATA (Option HW Raid 0/1)		
<b>PSU</b>	9V~36V DC-IN					
<b>I/O</b>	4x 10GbE LAN					
	2x USB3.0 + 2x USB2.0					
	2x DP ports					
	Power Switch + HDD/SSD LED					
<b>OS</b>	Win10, Win server 2012 R2 Standard					