

Overview

The Darveen NBC-1120-N100 is a compact, fanless embedded computer powered by the Intel® Alder Lake-N N100 processor, designed for ultra-low power applications. It supports dual 4K displays via 2x HDMI 2.0 ports. Despite its small size, it offers versatile I/O options to support IoT edge data collection. Built for industrial use, it features flexible expansion capabilities, extended temperature range, and rugged design. With support for 4G LTE, Wi-Fi 6, and an internal SIM slot, it's ideal for outdoor IoT, kiosks, and remote monitoring.

Features

- Intel® Alder Lake-N N100 Processor
- 2x GigaLAN, 6x USB, 2x COM (2x RS-232/485)
- 2x HDMI, 1x DP
- 1x Full length Mini PCIe and 1 x M.2 2230 for wireless connectivity
- 1x M.2 2280 SATA, 1x 2.5" SATA HDD
- 12V DC-IN



Operating Temp.



Power Input



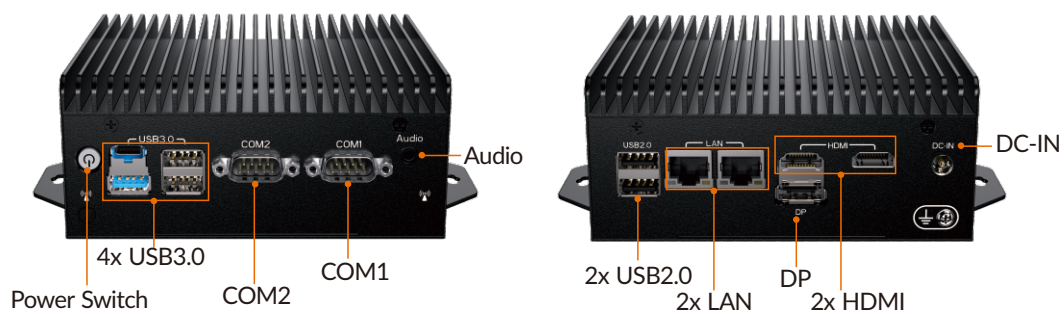
Fanless



Ultra-thin Handheld



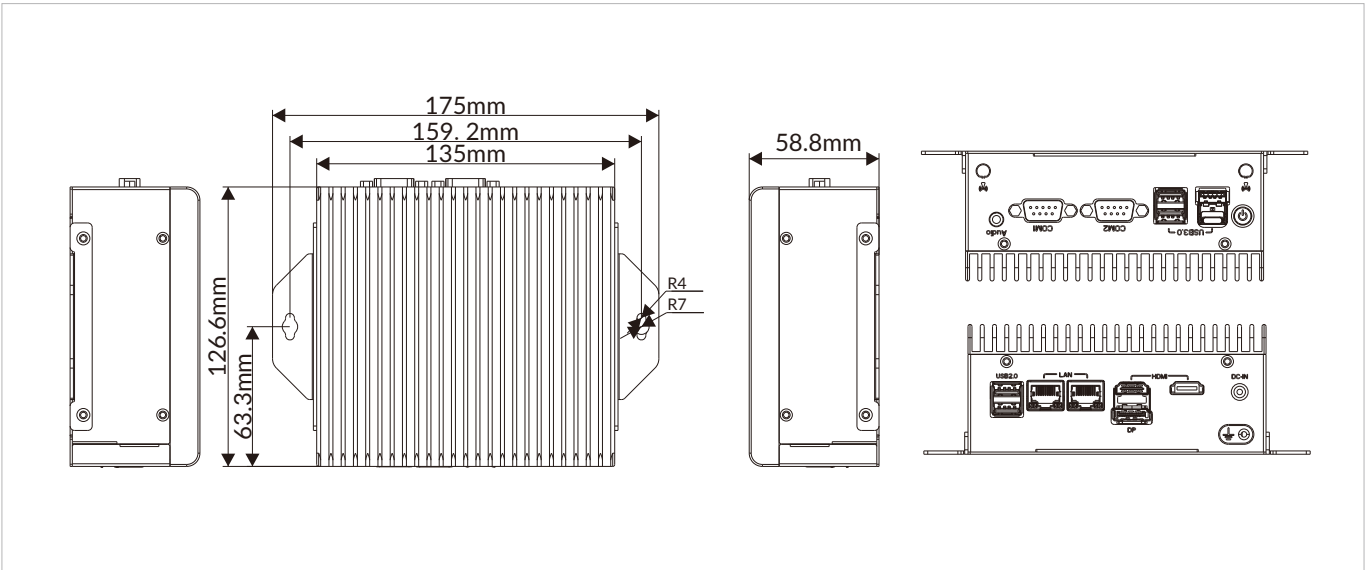
I/O Interfaces



Specifications

System	
CPU	Intel® Alder Lake-N N100
CPU TDP	6W
Memory	1x DDR4 3200 MHz SO-DIMM up to 16GB
Storage	1x 2.5" SATA HDD 1 x M.2 M-Key 2280 SATA
BIOS	AMI UEFI
TPM	BIOS
Watchdog Timer	Software programmable supports 256 levels system reset
I/O Ports	
USB	2x USB 2.0, 4x USB 3.0 (1x TYPE-C)
Serial	2x COM ((2x RS-232/485)
Ethernet	2x RJ45 GbE Intel® I226-V
Display	2x HDMI, 1x DP
SIM Card Slot	1x Internal SIM card slot
Antenna	2x SMA Antenna Holes
Expansion Slot	
Mini PCIe	1x Full length mini PCIe
M.2	1x M.2 E-Key 2230 1 x M.2 M-Key 2280 SATA
RF Communication	
Wi-Fi	Wi-Fi 6 (M.2 2230)
Cellular	4G-LTE (Mini PCIe)
Bluetooth	Bluetooth 5.0 (M.2 2230)
GNSS	GPS/Glonass/BeiDou (Mini PCIe)
Audio	
Audio	Mic in, line out
Power	
Button	Yes
Remote Power On/Off	NA
Battery	NA
Power Mode	AT/ATX
DC Input	12VDC
Operating System	
Windows	Windows 10/11
Linux	Ubuntu
Mechanical	
Dimensions (W x D x H)	135 x 127 x 59 mm (5.32 x 5 x 2.32 inches)
Weight (N.W.)	1 kg (2.2 lbs)
Mounting	Wall mount
Material	Aluminum alloy
Environment	
Operating Temperature	-10°C to 60°C (14°F to 140°F, with SSD Airflow 0.7m/s)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	10% to 95% @ 40°C (104°F), non-condensing
Certification	
EMC	CE, FCC, Class A

Dimensions



Optional Accessories

Part No.	Description
C.02.009.000126	100-240VAC Input, 12VDC/5A Output, 60W, STD Connector (5.5*2.5*11)

Ordering Information

Part No.	Description
NBC-1120-N100-A0	N100 NBC with 2x COM(RS-232/485), 2x LAN, 6x USB, 2x HDMI, 1xDP, 12VDC