

POC-300 Series

Intel® Apollo Lake Pentium® N4200 and Atom™ E3950 Ultra-Compact DIN-Rail Controller with GbE, PoE and USB 3.0



Key Features

- Intel® Apollo Lake Pentium® N4200 and Atom™ E3950 quad-core processor
- Rugged, -25 °C to 70 °C fanless operation
- One GbE port and two Gigabit PoE+ ports
- Two USB 3.0 and two USB 2.0 ports
- DVI + VGA dual display outputs
- Front-accessible I/O and DIN-rail mounting design
- MeziO™ interface compatible

Introduction

Experiencing the giant leaping of performance on our Intel® Apollo Lake Pentium® and Atom™ platform! POC-300 series possesses latest Pentium® N4200 and Atom™ x7-E3950 quad-core processor, which offers 1.5 times of CPU performance and 3 times of GPU performance compared to previous generation Atom™ E3845 CPU.

POC-300 series has ingenious mechanical design combining ultra compactness and DIN-rail mounting chassis with front-accessible I/O. It comprises a complete computer system, including GbE, USB 3.0/2.0, COM ports and mSATA storage, in a compact 5.6 x 15 x 11 cm footprint. IEEE 802.3at PoE+ function is available on its 2 of 3 GbE ports to power cameras for machine vision or surveillance applications. POC-300 series also features Neosys' MeziO™ interface for easy function expansion via versatile MeziO™ modules.

The heritage of Neosys' proven fanless design makes POC-300 series extremely reliable in harsh environments. With its rich I/O, advanced CPU and compact size, POC-300 is a compelling fanless controller beneficial for various industrial applications.

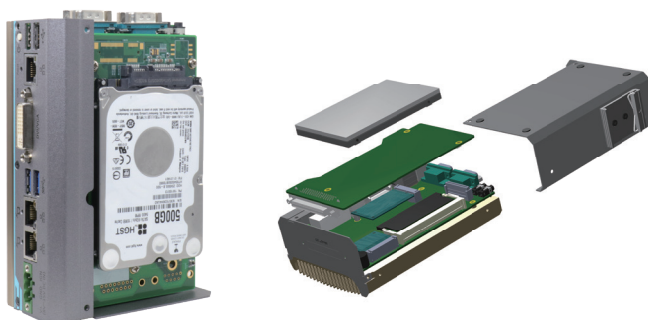
Specifications

| | POC-300 | POC-310 | POC-320 | POC-330 |
|------------------------|--|---------|---|---------|
| System Core | | | | |
| Processor | Intel® Atom™ E3950 1.6/2.0 GHz quad-core processor | | Intel® Pentium® N4200 1.1/2.5 GHz quad-core processor | |
| Graphics | Integrated Intel® HD Graphics 505 | | | |
| Memory | 1x SODIMM socket for DDR3L-1866, up to 8GB | | | |
| Panel I/O Interface | | | | |
| Ethernet | 3x Gigabit Ethernet ports by Intel® I210 GbE controller | | | |
| PoE | IEEE 802.3at PoE+ on port #2 and #3 | - | IEEE 802.3at PoE+ on port #2 and #3 | - |
| Video Port | VGA and DVI dual display outputs via DVI-I connector | | | |
| USB | 2x USB 3.0 ports and 2x USB 2.0 ports | | | |
| Serial Port | 1x Software-programmable RS-232/422/485 ports (COM1) 3x 3-wire RS-232 ports (COM2/3/4) or 1x RS-422/485 port (COM2) | | | |
| Audio | 1x Mic-in and 1x Speaker-out | | | |
| Internal I/O Interface | | | | |
| Mini-PCIe | 1x full-size mini PCI Express slot with USIM socket | | | |
| Expandable I/O | 1x MeziO™ expansion interface for Neosys MeziO™ modules | | | |
| Storage Interface | | | | |
| mSATA | 1x half-size mSATA port | | | |
| SATA | 1x SATA port for 2.5" SSD/ HDD installation (optional with MeziO-R11) | | | |

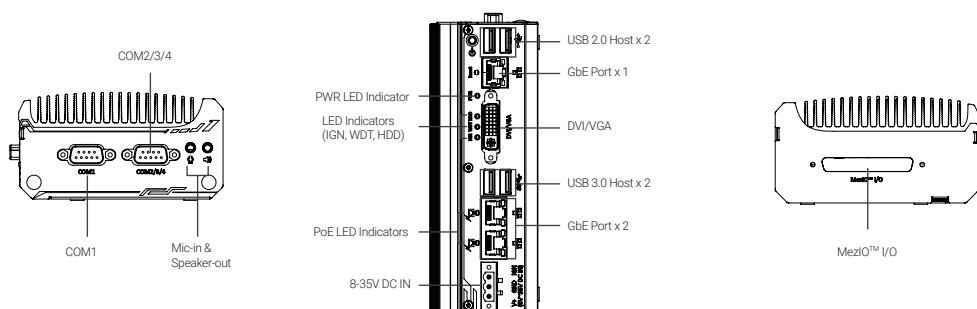
| | POC-300 | POC-310 | POC-320 | POC-330 |
|-----------------------|--|---------|---------|---------|
| Power Supply | | | | |
| DC Input | 1x 3-pin pluggable terminal block for 8~35 VDC DC input | | | |
| Mechanical | | | | |
| Dimension | 56 mm (W) x 108 mm (H) x 153 mm (D) | | | |
| Weight | 0.96 kg (incl. CPU, memory and HDD) | | | |
| Mounting | DIN-rail mount (standard) or Wall-mount (optional) | | | |
| Environmental | | | | |
| Operating Temperature | -25°C ~ 70°C with SSD, 100% CPU loading */** -10°C ~ 50°C with HDD, 100% CPU loading */** | | | |
| Storage Temperature | -40°C ~85°C** | | | |
| Humidity | 10%~90% , non-condensing | | | |
| Vibration | Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64) | | | |
| Shock | Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27) | | | |
| EMC | CE/FCC Class A, according to EN55022, EN55024 & EN55032 | | | |

* The 100% CPU/GPU loading for high temperature test is applied using Passmark® BurnInTest™ v8.0. For detail testing criteria, please contact Neosys Technology

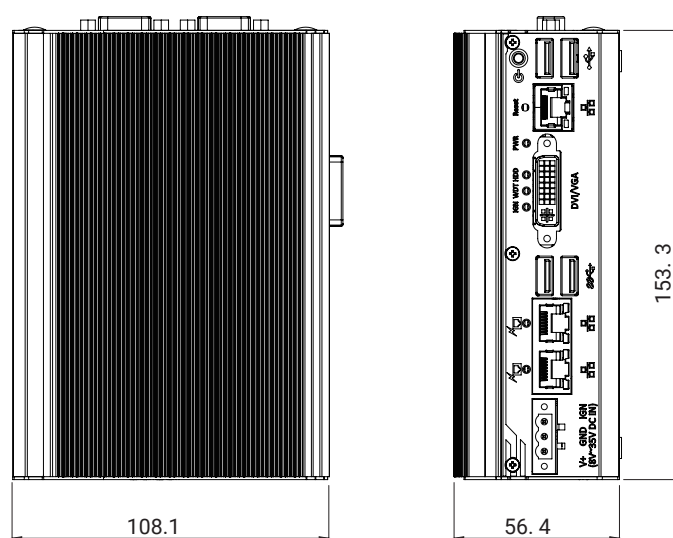
** For sub-zero operating temperature, a wide temperature HDD drive or Solid State Disk (SSD) is required.



Appearance



Dimensions



Unit : mm

Ordering Information

| Model No. | Product Description |
|-----------|--|
| POC-300 | Intel® Apollo Lake Atom™ E3950 Ultra-Compact DIN-Rail Controller with 1xGbE, 2x PoE+ and 2x USB 3.0 |
| POC-310 | Intel® Apollo Lake Atom™ E3950 Ultra-Compact DIN-Rail Controller with 3xGbE and 2x USB 3.0 |
| POC-320 | Intel® Apollo Lake Pentium® N4200 Ultra-Compact DIN-Rail Controller with 1xGbE, 2x PoE+ and 2x USB 3.0 |
| POC-330 | Intel® Apollo Lake Pentium® N4200 Ultra-Compact DIN-Rail Controller with 3xGbE and 2x USB 3.0 |

Optional Accessories

64GB mSATA mini SSD with pre-installed Windows 10 IoT English version*

128GB mSATA mini SSD with pre-installed Windows 10 IoT English version*

12V, 60W AC/DC power adapter

Wall-mounting bracket

MezIO™ Modules

| | |
|-------------|---|
| MezIO™-C180 | MezIO™ module with 4x RS-232/422/485 ports and 4x RS-232 ports |
| MezIO™-C181 | MezIO™ module with 4x RS-232/422/485 ports and 4x RS-422/485 ports |
| MezIO™-D220 | MezIO™ module with 8-CH isolated digital input and 8-CH isolated digital output |
| MezIO™-D230 | MezIO™ module with 16-CH isolated digital input and 16-CH isolated digital output |
| MezIO™-V20 | MezIO™ module with ignition power control function and 1x mini-PCIe socket for in-vehicle usage |
| MezIO™-R11 | MezIO™ module with SATA port for 2.5" HDD/ SSD |

* For Windows 10 IoT with other language packages, MOQ is required. Please contact Neousys for further information