NEOUSYS TECHNOLOGY

POC-300 Series

Intel® Apollo Lake Pentium® N4200 and Atom™ E3950 Ultra-Compact DIN-rail Controller with GbE, PoE and USB3.0

⚡ Key Features

- · **Intel® Apollo Lake Pentium® N4200 and Atom™ E3950 quad-core processor**
- · **Fanless, rugged and wide temperature operation (-25 °C to 70 °C)**
- · **One GbE port and two Gigabit PoE+ ports**
- · **Two USB3.0 and two USB2.0 ports**
- · **DVI + VGA dual display outputs**
- · **Front-accessible I/O**
- · **DIN-rail mounting design**
- · **MezIO™ interface compatible**

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Introduction

Experience the giant leap in performance of Intel® Apollo Lake Pentium® and Atom™ platform! POC-300 series features the latest Pentium® N4200 and Atom™ x7-E3950 quad-core processors, which offers up to 1.5 times of CPU performance and 3 times the GPU performance improvement compared to previous generation Atom™ E3845 CPU.

POC-300 series have an ingenious mechanical design that combines DIN-rail mounting chassis with front-accessible I/O in one ultra-compact enclosure. They have rich computer-like I/Os such as GbE, USB3.0/ 2,0, COM ports and mSATA storage, in a compact footprint that measures just 5.6 x 15 x 11 cm. IEEE 802.3at PoE+ function is also available on 2 of the 3 GbE ports to power cameras for machine vision or surveillance applications. POC-300 series features Neousys' MezIO™ interface for easy function expansion via versatile MezIO™ modules.

With Neousys' proven fanless design heritage, the POC-300 series thrive in harsh environments. Featuring rich I/Os, advanced CPU and compact size, POC-300 series are compelling fanless controllers 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	Up to 8GB DDR3L-1866 (single SO-DIMM slot)			
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 USB3.0 ports and 2x USB2.0 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 Neousys MezIO™ modules			
Storage Interface				
mSATA	1x half-size mSATA port			
Power Supply				
DC Input	1x 3-pin pluggable terminal block for 8~35V 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)			

	POC-300	POC-310	POC-320	POC-330
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 EN 55022, EN 55024 & EN 55032			

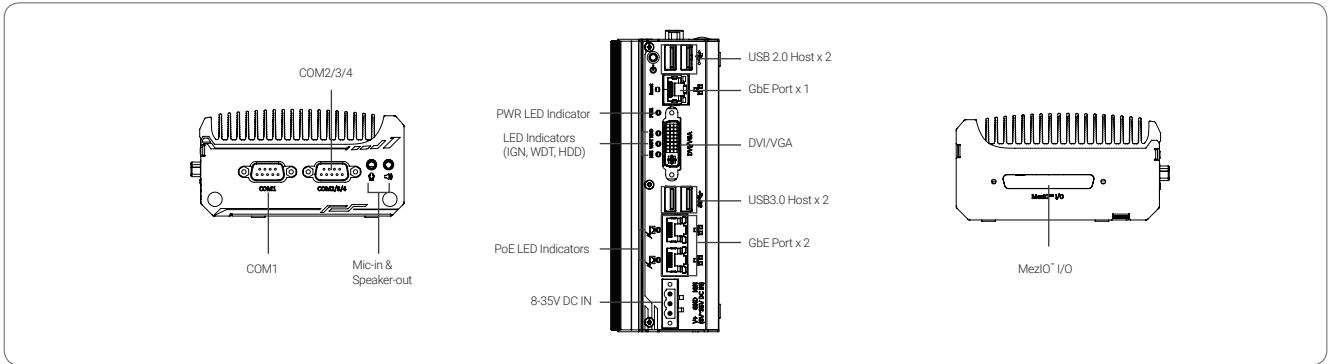** The 100% CPU/GPU loading for high temperature test is applied using Passmark® BurnInTest™ v8.0. For detail testing criteria, please contact Neousys Technology*
** For sub-zero operating temperature, a wide temperature HDD drive or Solid State Disk (SSD) is required.
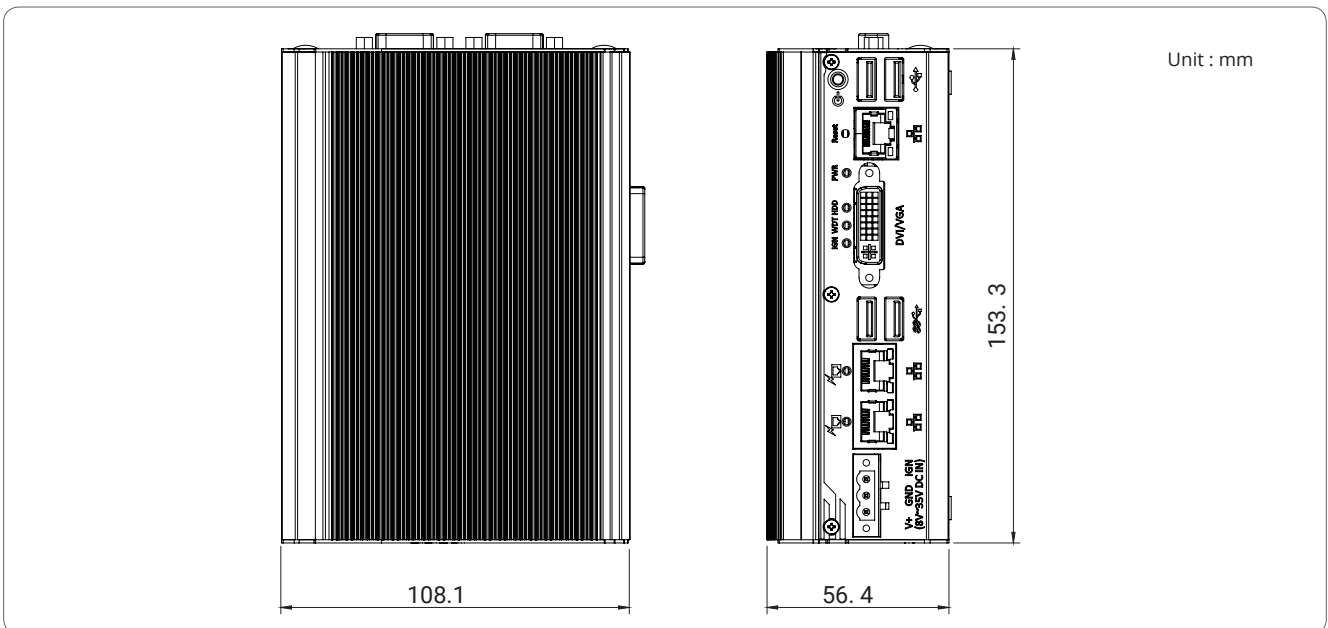
▲ POC-300 with MezIO™ - R11 and 2.5" HDD

Appearance

Dimensions

Unit : mm

153. 3

108.1   56. 4

Ordering Information

Model No.	Product Description
POC-300	Intel® Apollo Lake Atom™ E3950 ultra-compact DIN-rail controller with 1xGbE, 2x PoE+ and 2x USB3.0
POC-310	Intel® Apollo Lake Atom™ E3950 ultra-compact DIN-rail Controller with 3xGbE and 2x USB3.0
POC-320	Intel® Apollo Lake Pentium® N4200 ultra-compact DIN-rail controller with 1xGbE, 2x PoE+ and 2x USB3.0
POC-330	Intel® Apollo Lake Pentium® N4200 ultra-compact DIN-rail controller with 3xGbE and 2x USB3.0

Ordering Model Matrix

Pre-installed MezIO Controller	MezIO-R11	MezIO-R12
POC-300	POC-301	POC-302
POC-310	POC-311	POC-312
POC-320	POC-321	POC-322
POC-330	POC-331	POC-332

Optional Accessories

PA-60W-OW	60W AC/DC power adapter with 12V, 5A DC output, cord end terminals for terminal block. operating temperature : -30 to 60 °C
WM-300V	Wall mounting assembly for POC-300 series, vertical type
WM-300H	Wall mounting assembly for POC-300 series, horizontal type
64GB mSATA mini SSD with pre-installed Windows 10 IoT English version*	
128GB mSATA mini SSD with pre-installed Windows 10 IoT English version*	
C-D9-3D9-RS232-10CM	1x DB9 (Female) to 3x DB9 (Male), length: 10CM

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™-U4	MezIO™ module with 4x USB
MezIO™-R11	MezIO™ module with SATA port for 2.5" HDD/ SSD
MezIO™-R12	MezIO™ module with SATA port for 2.5" HDD/ SSD, 4-CH isolated DI and 4-CH isolated

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

All specifications and photos are subject to change without prior notice