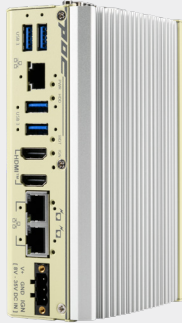


POC-600

Intel® Atom® x7425E Ultra-Compact Fanless Embedded Computer with 3x 2.5GbE & PoE+



Key Features

- Intel® Atom® x7425E processor 12W with 4 E-Cores
- Rugged -25 °C to 70 °C fanless operation
- Up to 16GB DDR5-5600 SODIMM
- 2x 2.5GbE PoE+ ports and 1x 2.5GbE port with screw-lock
- 4x USB 3.2 with screw-lock
- Dual HDMI™ display outputs supporting 3840 x 2160 resolution
- Front I/O access and DIN-rail mounting design
- 8 to 35V wide DC input and MezIO® compatible

Introduction

POC-600 is Neosys' new ultra-compact fanless embedded computer based on Intel® Atom® x7425E processor. With four efficient cores operating at only 12W TDP and support for up to 16 GB DDR5 memory, it delivers up to 1.5x CPU performance improvement and higher memory bandwidth compared to previous Atom® platforms, making it a reliable solution for next-generation industrial edge deployments.

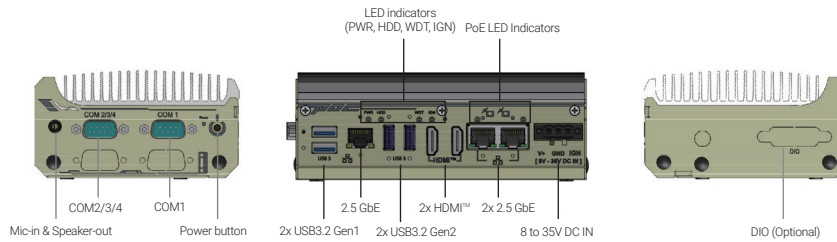
Despite its small form factor, POC-600 delivers comprehensive connectivity. It integrates three 2.5GbE ports powered by Intel® I226-IT controllers, with an option for two PoE+ ports to power cameras or sensors. The system also provides dual HDMI™ 1.4b outputs supporting 3840 x 2160 resolution, four screw-lock USB3.2 ports for reliable high-speed connections, as well as versatile serial communication with one software-programmable RS-232/ 422/ 485 and additional RS-232 or RS-422/ 485 ports. For storage, POC-600 supports one M.2 2280 SATA device and Neosys' proprietary MezIO® interface for adding application-specific functions such as isolated DIO, ignition control, or wireless modules.

With its balance of performance, low power consumption, and robust I/O capabilities, POC-600 is designed for a wide range of industrial applications. It is ideal for machine vision systems requiring multiple high-speed camera connections and smart transportation that demands reliable PoE+ networking. Sharing the same compact footprint as POC-400 and POC-300, POC-600 allows seamless system upgrades and supports DIN-rail mounting for easy and secure installation in industrial control cabinets or confined spaces, enabling next-generation industrial automation and intelligent edge solutions.

Specifications

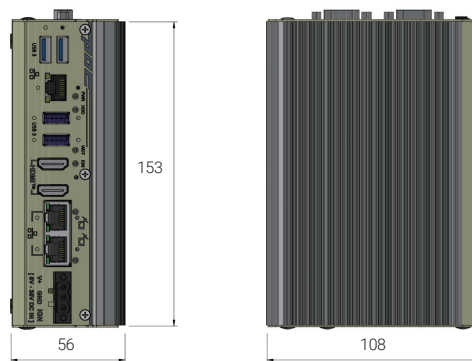
| System Core | | Power Supply | |
|-------------------|--|-----------------------|---|
| Processor | Intel® Atom® x7425E processor 12W with 4 E-Cores (4C/4T, 1.5 /3.4 GHz, 12W TDP) | DC Input | 1x 3-pin pluggable terminal block for 8 to 35V DC input |
| Graphics | Integrated Intel® UHD Graphics with 24EUs | Mechanical | |
| Memory | Up to 16 GB DDR5-5600 SDRAM (one SODIMM socket) | Dimension | 56 mm (W) x 108 mm (D) x 153 mm (H) |
| TPM | Supports dTPM 2.0 | Weight | 0.98 kg |
| I/O Interface | | Mounting | DIN-rail mount (Standard) or Wall-mount (Optional) |
| Ethernet | 3x 2.5Gb Ethernet ports by Intel® I226-IT GbE controllers | Environmental | |
| PoE+ | IEEE 802.3at PoE+ on port #2 and #3, 50 W total power budget (Only for POC-600) | Operating Temperature | -25°C ~ 70°C |
| Native Video Port | 2x HDMI™ 1.4b, Supporting 3840 x 2160 | Storage Temperature | -40°C ~ 85°C |
| 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) | Humidity | 10%~90% , non-condensing |
| USB | 2x USB 3.2 Gen1 with screw-lock 2x USB 3.2 Gen2 with screw-lock | Vibration | MIL-STD-810H, Method 514.8, Category 4 |
| Storage Interface | | Shock | MIL-STD-810H, Method 516.8, Procedure I |
| M.2 M key | 1x M.2 2280 SATA interface | EMC | CE/FCC Class A, according to EN 55032 & EN 55035 |
| Expansion Bus | | | |
| Expandable I/O | 1x MezIO® expansion interface for Neosys MezIO® modules | | |

Appearance



Dimensions

Unit : mm



Ordering Information

| Model No. | Product Description |
|----------------|--|
| POC-600 | Intel® Atom® x7425E ultra-compact DIN-rail fanless rugged computer with 1x 2.5GbE, 2x 2.5G PoE+ and 4x USB 3.2 |
| POC-610 | Intel® Atom® x7425E ultra-compact DIN-rail fanless rugged computer with 3x 2.5GbE and 4x USB 3.2 |

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 |
| PA-120W-OW | 120W AC/DC power adapter with 20V, 6A DC output, cord end terminals for terminal block. Operating temperature : -30 to 70°C |
| Wmkit-V-POC300_400 | Wall mounting assembly for POC-300, POC-400, POC-40, POC-600 series, vertical type |
| Wmkit-H-POC300_400 | Wall mounting assembly for POC-300, POC-400, POC-600 series, horizontal type |
| Cbl-DB9F-3DB9M-15CM | 1x DB9 (Female) to 3x DB9 (Male), length: 15CM |

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®-D330 | MezIO® module with 16-CH isolated DI and 16-CH isolated DO |
| 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 DO |
| MezIO®-U4-30 | MezIO® module with 4x USB3.1 ports |
| MezIO®-V21 | MezIO® module with ignition power control function and 1x mini-PCIe socket for in-vehicle usage |