

POC-120 Series

Ultra-compact Atom™ Bay Trail-I Fanless General-purpose Embedded Controller



CE FC

Key Features

- Low-profile, ultra-compact 15 cm x 10 cm x 3.4 cm footprint
- Intel® Atom™ E3826 1.46GHz dual-core processor
- Rugged, -25°C to 70°C fanless operation
- Two GigE ports and three USB2.0 ports
- One RS-232/ 422/ 485 port and one RS-232 port
- I/O expansion interface for ODM projects
- MeziO™ interface for easy function expansion

Introduction

Introducing Neosys' ultra-compact POC family! POC-120 is a low-cost, entry-level embedded controller in ultra-compact dimensions. With a height of 3.4 cm, the low-profile chassis is ideal for installation into confined spaces.

POC-120 utilizes Intel® Atom™ E3826 dual-core processor and it provides general I/Os, such as GigE ports, COM ports and USB3.0/ USB2.0 ports. For embedded applications, instead using traditional HDD, POC-120 supports mSATA SSD to ensure reliable disk access in harsh industrial environments. POC-120MZ also features Neosys' MeziO™ interface for I/O expansion. By customizing a mezzanine board, you can have versatile I/O functions and turn POC-120MZ from an ultra-compact controller into a tailor-made ultra-compact embedded system for your application needs.

Specifications

System Core

Processor	Intel® Atom™ E3826 1.46 GHz dual-core processor
Graphics	Integrated Intel® HD graphics
Memory	Up to 8GB DDR3L-1333 (single SO-DIMM slot)

I/O Interface

Ethernet	2x Gigabit Ethernet ports by Intel® I210 GbE controller
Video Port	1x VGA connector for both analog RGB output, supporting 2560x1600 resolution
Serial Port	1x RS-232/ 422/ 485 (COM1) 1x RS-232 (COM2)
USB	1x USB3.0 port and 2x USB2.0 ports
Audio	1x speaker-out

Storage Interface

mSATA	1x full-size mSATA socket
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Expansion Bus

Expandable I/O (POC-120MZ only)	1x MeziO™ expansion port for Neosys' MeziO™ modules
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Power Supply

DC Input	Built-in 8-35V DC input
Input Connector	2-pin spring-clamp terminal block for DC input

Mechanical

Dimension	105mm (W) x 149 mm (D) x 34mm (H) (POC-120) 105mm (W) x 149 mm (D) x 46mm (H) (POC-120MZ)
Weight	0.9 kg
Mounting	Wall-mounting (standard) or DIN-rail mounting (optional)

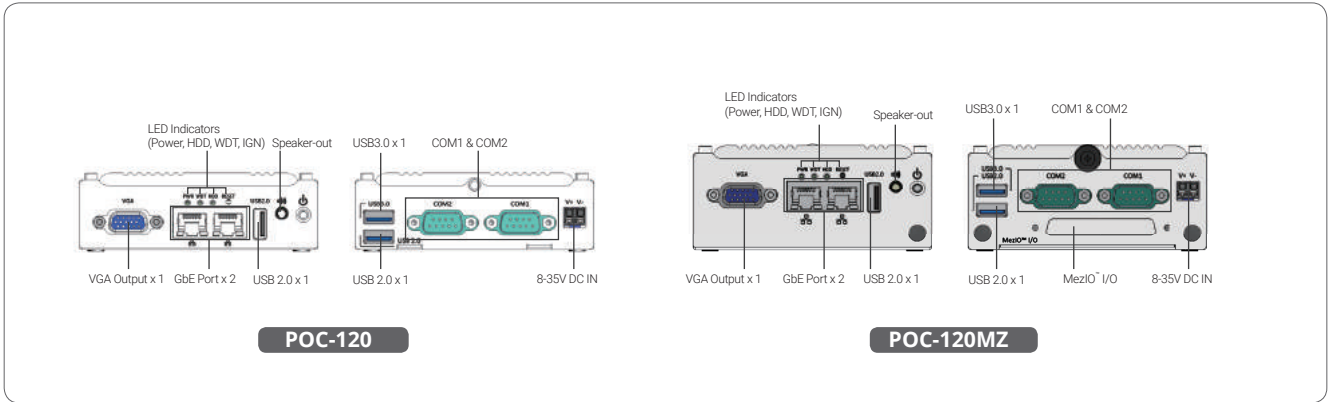
Environmental

Operating Temperature	-25°C ~ 70°C with SSD, 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

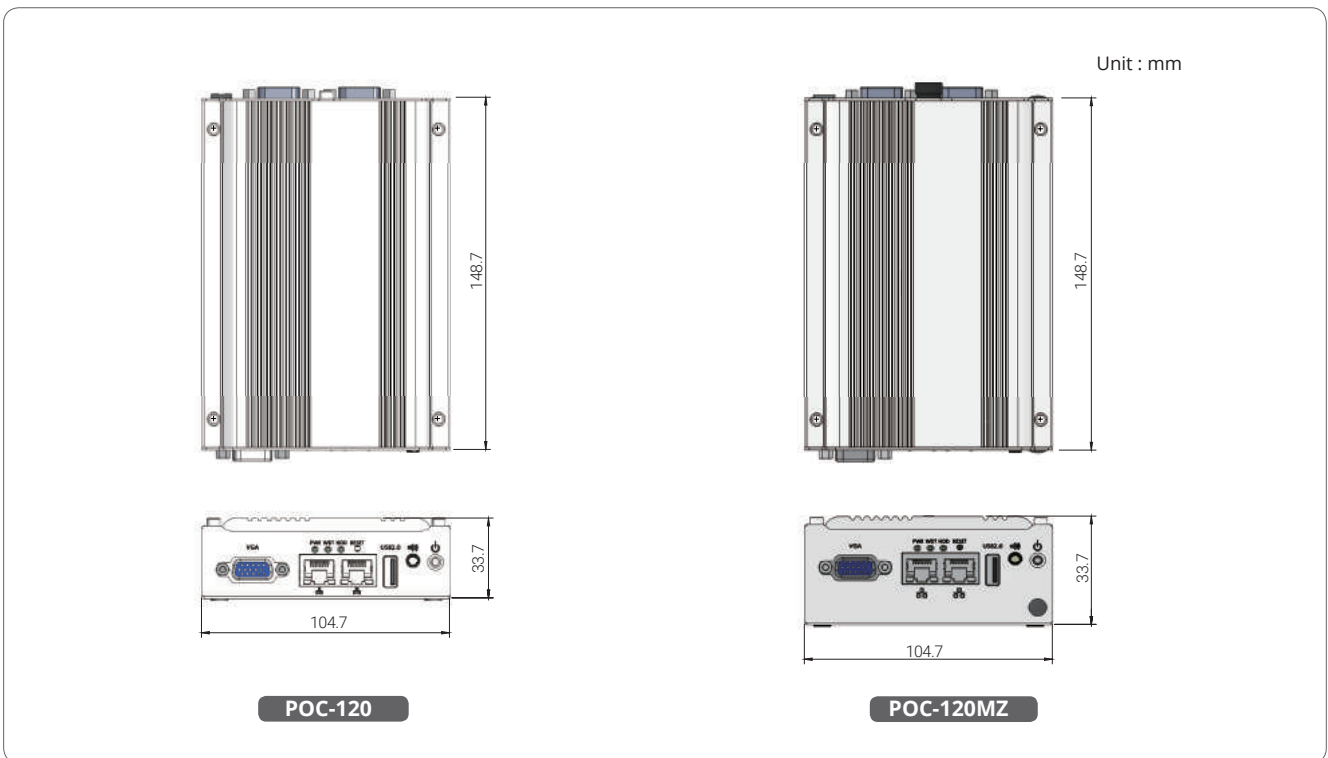
* 100% CPU loading is applied using Intel® Thermal Analysis Tool. For detail testing criteria, please contact Neosys Technology.

** For sub-zero operating temperature, a wide temperature mSATA SSD module is required.

Appearance



Dimensions



Ordering Information

Model No.	Product Description
POC-120	Intel® Atom™ E3826 ultra-compact controller with 2x GbE ports, 3x USB and 2x COM ports
POC-120MZ	Intel® Atom™ E3826 ultra-compact controller with 2x GbE ports, 3x USB, 2x COM ports and MeziO™ interface

Optional Accessories

DINRAIL-P	DIN-rail mounting assembly for POC-120 series
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

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™-R10	MeziO™ module with 2.5" HDD/ SSD accommodation and 1x mini-PCIe socket