POC-465AWP

IP65 Waterproof Computer with Intel® Atom® x6425E, 2x 2.5GbE and Isolated COM Ports

Preliminary

Key Features

- **IP65-rated waterproof and dustproof design**
- **Intel® Elkhart Lake Atom® x6425E quad-core 2.0GHz/ 3.0GHz 12W processor**
- **2x 2.5GbE Ethernet ports via M12 X-coded connectors**
- **1x isolated RS-232 and 1x isolated RS-422/485 via M12 A-coded connectors**
- **2x USB 2.0 ports via M12 A-coded connectors**
- **1x VGA port via M12 A-coded connector**
- **8-35V DC input with ignition power control input via M12 A-coded connector**

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Introduction

POC-465AWP is a new segment of Neousys fanless computers featuring an IP65 rating based on Intel® Elkhart Lake Atom. The acronym AWP stands for affordability, waterproof, and protection. In short, the POC-465AWP is designed to solve your everyday environmental challenges. With IP65 waterproof protection in a stainless steel and aluminum chassis, the air-tight system prevents internal PCBA corrosion in high salinity or humidity situations. Secondly, the hermetic enclosure can be deployed into grimy or dusty air-polluted environments such as a farm or mining site without being affected. The system also features -25°C to 70°C wide operating temperature capability and an efficient heat dissipation design to minimize thermal throttling.

Connection-wise, POC-465AWP comes with M12 connectors to ensure connection in demanding, shock, and vibration environments. The system has two 2.5G Ethernet ports, one isolated RS-232, and one isolated RS-422/485. The isolated design protects the motherboard from voltage spikes that may damage internal components. It also has a VGA, two USB2.0, an M.2 M key to support SATA SSD, and a mini-PCIe for wireless WiFi/ LTE, CAN bus, etc.

Combining IP65, M12 and great thermal design, POC-465AWP is reliable and highly tolerant to challenging conditions to fulfill versatile applications. Its ultra-compact size fits easily into confined spaces, and its waterproof capability makes it suitable for outdoor applications like wildfire detection, unmanned vehicle; or harsh environments like food / beverage manufacturing and pharmaceutical processing. The IP65 rating is an additional function that can enhance a product's value and quality, and such is the case with Neousys' POC-465AWP.

Specifications

System Core	
Processor	Intel® Elkhart Lake Atom® x6425E quad-core 2.0GHz/ 3.0GHz 12W processor
Graphics	Integrated Intel® HD Graphics
Memory	Up to 32 GB DDR4-3200 SDRAM by one SODIMM socket
TPM	Supports TPM 2.0 (fTPM/ dTPM)
I/O Interface	
Ethernet	2x 2.5G Ethernet ports by Intel® I225-IT / I226-IT via M12 X-coded, 8-pin connector
Native Video Port	1x VGA connector, supporting 1920 x 1200 resolution, via M12 A-coded, 17-pin connector
Serial Port	1x isolated RS-232 port (COM1) and 1x isolated RS-422/485 ports (COM2) via M12 A-coded, 8-pin connector
USB	2x USB 2.0 ports via M12 A-coded, 8-pin connector
Storage Interface	
M.2	1x M.2 2280 M key socket for SATA SSD
Internal Expansion Bus	
Mini-PCIe	1x full-size mini PCI Express socket with internal micro SIM socket

Power Supply	
DC Input	8~35V DC input with ignition power control input via M12 A-coded, 5-pin connector
Mechanical	
Dimension	106 mm (W) x 159.7 mm (D) x 79 mm (H)
Weight	1.45kg
Mounting	Wall-mount (optional)
Environmental	
Operating Temperature	-25°C ~ 70°C
Storage Temperature	-40°C ~ 85°C
Humidity	10%~90% , non-condensing
Vibration	Operating, MIL-STD-810G, Method 514.6, Category 4
Shock	Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
EMC	CE/FCC Class A, according to EN 55032 & EN 55035

Preliminary

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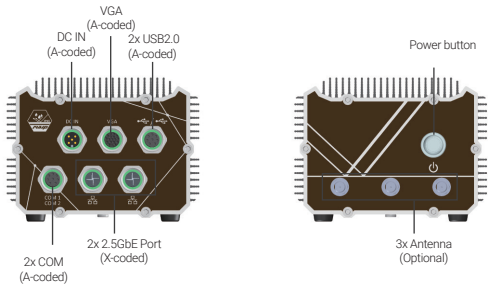
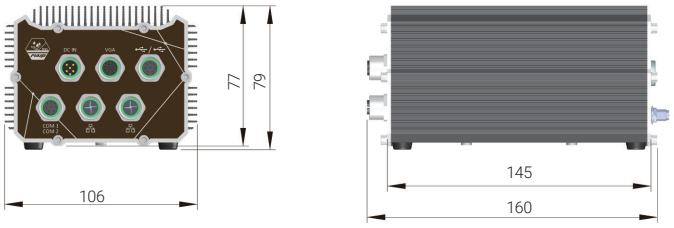
Appearance



Dimensions



Ordering Information

Model No.	Product Description
POC-465AWP	IP65 Waterproof Computer with Intel® Atom® x6425E, 2x 2.5GbE and Isolated COM Ports

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
M12-Cable-Kit-POC-465AWP	2x LAN, 1x VGA, 2x USB2.0 (by Y-cable), 2x COM (by Y-cable) and DC power cables
Wmkit-POC465AWP	Wall-mount assembly for POC-465AWP

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All specifications and photos are subject to change without prior notice