# POC-465AWP

IP66 Waterproof Computer with Intel® Atom® x6425E, 2x 2.5GbE and Isolated COM Ports

## Key Features

- **IP66-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**

## Introduction

POC-465AWP is a new segment of Neousys fanless computers featuring an IP66 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 IP66 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.
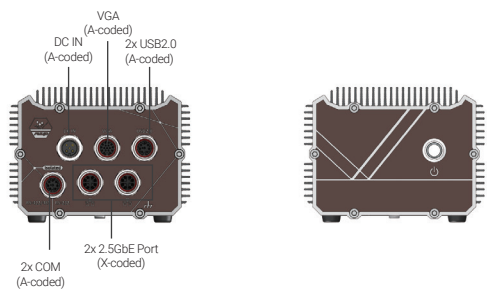
Combining IP66, M12 and great thermal design, POC-465AWP is reliable and highly tolerant to challenging conditions to fulfill versatile applications. Its ultra-compact size fits easily into confined spaces, and its waterproof capability makes it suitable for outdoor applications like wildfire detection, unmanned vehicle; or harsh environments like food / beverage manufacturing and pharmaceutical processing. The IP66 rating is an additional function that can enhance a product's value and quality, and such is the case with Neousys' POC-465AWP.
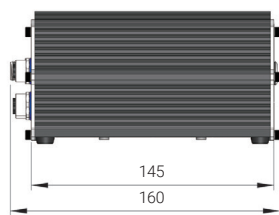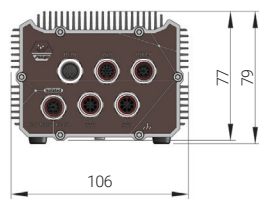
## Specifications

| System Core | |
|---|---|
| Processor | Intel® Elkhart Lake Atom® x6425E quad-core 2.0GHz/ 3.0GHz 12W processor |
| Graphics | Integrated Intel® UHD 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® 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) |

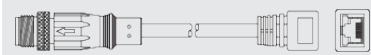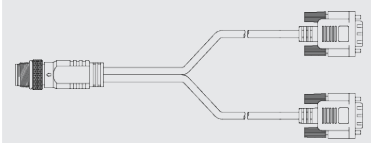| Environmental | |
|---|---|
| Operating Temperature | -25°C ~ 70°C |
| Storage Temperature | -40°C ~ 85°C |
| Humidity | 10%~90% , non-condensing |
| Vibration | Operating, MIL-STD-810G, Method 514.6, Category 4 |
| Shock | Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II |
| EMC | CE/FCC Class A, according to EN 55032 & EN 55035 |

Rev020326

## Appearance



VGA
(A-coded)
DC IN
(A-coded)
2x USB2.0
(A-coded)

2x COM
(A-coded)

2x 2.5GbE Port
(X-coded)
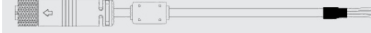
## Dimensions

Unit : mm



77
79
106
145
160

## Ordering Information

| Model No. | Product Description |
|---|---|
| POC-465AWP | IP66 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 |
| WMkit-POC465AWP | Wall-mount assembly for POC-465AWP |

# POC-465AWP Series

| Type | Model Name | Description |
|---|---|---|
| | Cbl-M12X8M-RJ45F-100CM | M12( 8-pole-X-coded) to RJ45, CAT6A, Length : 100CM |
| | Cbl-M12A8M-2U2TA-180CM1 | M12 (8-pole-A-coded) to 2xUSB 2.0 type A (female), Length: 180CM |
| | Cbl-M12A8M-2DB9M-180CM | M12 (8-pole-A-coded male) to 2x DB9 male, Length: 180CM |
| | Cbl-M12A17M-VGA-180CM3 | M12 (17-pole-A-coded-S) to VGA (male), Length : 180CM |
| | Cbl-M12A5F-OW3-180CM1 | M12(5-pole-A-code Female) to 3P cord end terminal, Length:180CM |

## Cable Kit

| POC-465AWP M12 Cable kit | | |
|---|---|---|
| **Cblkit-M12-POC-465AWP** | 2x Cbl-M12X8M-RJ45F-100CM | 1x Cbl-M12A8M-2U2TA-180CM1 |
| | 1x Cbl-M12A8M-2DB9M-180CM | 1x Cbl-M12A17M-VGA-180CM3 |
| | 1x Cbl-M12A5F-OW3-180CM1 | |