



# ARES-5320 Series

Fanless DIN-Rail Embedded System with Intel® Elkhart Lake Atom™ Processor



## Features

- Intel® Atom™ x6425RE Processor
- Support 3 x 2.5 GbE (2 w/ PoE complies with IEEE 802.3af)
- Support 3 x USB 3.1 + 1 x USB 2.0
- Support up to 8 x COM & 24bit Digital I/O
- Wide-range Operating Temperature from -20°C to 70°C
- Power on & off Delay Control / Configurable Ignition Power Control

## System

CPU	Soldered onboard Intel® Atom™ x6425RE Processor
Memory	1 x 260-pin DDR4 SO-DIMM sockets, supporting 3200MHz SDRAM up to 32GB
Chipset	SoC
Graphics	Intel® UHD Graphic for 10 <sup>th</sup> Gen Intel® Processors
LAN Chipset	3 x Intel® i226LM
Watchdog Timer	1~255 levels reset
TPM	dTPM 2.0

## I/O

Serial Port	2 x RS232 2 x RS232 <sub>(Default)</sub> /422/485 4 x 2kV isolated RS232/422/485 (For -ISO ver.)
USB Port	3 x USB-A 3.2 Gen1 (5Gbps) 1 x USB-A 2.0
LAN Port	3 x 2.5GbE (For A & A-ISO ver.) 1 x 2.5GbE + 2 x 2.5GbE PoE(IEEE802.3af) (For P & P-ISO ver.)
Video Port	1 x DP, up to 4096 x 2160@60Hz 1 x VGA, up to 1920 x 1200@60Hz
Digital I/O	8 x DI/O (For A & P ver.) 8 x DI & 8 x DO both w/ 2kV isolation (For -ISO ver.)
Expansion Bus	1 x Full-size mPCIe slot (USB2.0, colay w/ mSATA) w/ 1 x nano SIM slot 1 x Full-size mPCIe slot (PCIe x1 + USB2.0) 1 x Half-size mPCIe slot (PCIe x1 + USB2.0)

## Storage

Type	1 x Onboard 64G eMMC 1 x Full-size mSATA slot (colay w/ mPCIe) 1 x 2.5" SSD/HDD tray (For A & P ver.)
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## Power Requirement

Power Input	DC 9~36V (4 pin terminal block: V+, V-, SW+, SW-)
Power Ignition	1 x 2 pin terminal block (IGN+, IGN-)
Power Consumption	Max. 65W

## Environmental

Operating Temp.	-20 ~ 70°C, ambient w/ air flow
Storage Temp.	-40 ~ 80°C
Operating Humidity	10-95% @ 70°C (non-condensing)
Vibration	5~500Hz 3 Grms X,Y,Z axis w/ eMMC, according to IEC 68-2-64 10G peak accel (11 m sec. duration), operation
Shock	30G peak accel (11 m sec. duration), nonoperation According to IEC 68-2-27

## Qualification

Certification	CE, FCC (Class A) E-Mark
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## Mechanical

Construction	Metal + Aluminum Alloy
Mounting	DIN-rail (standard) Wall mount (optional w/ CTOS bracket)
Weight	1.9kg
Dimensions (W x D x H)	70 x 125 x 190 mm

## OS Support

Windows 10 IoT / Windows 11 IoT / Ubuntu

## Ordering Information

ARES-5320-x6425A	ARES-5320 w/ 3 x 2.5GbE, 4 x COM, 4 x USB, 1 x DP, 1 x VGA, 8 x DI/O, 64G eMMC & <b>1 x 2.5" SSD/HDD Tray</b>
ARES-5320-x6425P	ARES-5320 w/ <b>2 x 2.5G PoE + 1 x 2.5GbE</b> , 4 x COM, 4 x USB, 1 x DP, 1 x VGA, 8 x DI/O, 64G eMMC & <b>1 x 2.5" SSD/HDD Tray</b>
ARES-5320-x6425A-ISO (BTO)	ARES-5320 w/ 3 x 2.5GbE, <b>8 x COM(4 x isolated)</b> , 4 x USB, 1 x DP, 1 x VGA, <b>8 x isolated DI, 8 x isolated DO</b> & 64G eMMC
ARES-5320-x6425P-ISO (BTO)	ARES-5320 w/ <b>2 x 2.5G PoE + 1 x 2.5GbE</b> , <b>8 x COM(4 x isolated)</b> , 4 x USB, 1 x DP, 1 x VGA, <b>8 x isolated DI, 8 x isolated DO</b> & 64G eMMC