



ARES-1983H Series

Machine Vision Controller with Intel® 12th & 13th Gen. Core™ i7/i5/i3 Processor

ARES-1983H



ARES-1983H-MV



Features

- Socket LGA1700 for Intel® 12th/13th Gen. Core™ i7/i5/i3 Processor
- Fansink Design - Active Cooling without Dust Accumulation
- A rich Selection of Camera Connection - 7 x LAN(4 w/ PoE) & 6 x USB
- 16 x DI/DO with 1.5KV Isolation Protection
- Dual-display for 1 x VGA and 1 x DisplayPort
- 2 x Internal USB 2.0 Type-A connector

System

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|----------------|--|
| CPU | Intel® 12th/13th Core™ i7/i5/i3 processor in LGA1700 Socket (Max.65W) |
| Memory | 1 x 260-pin DDR5 SO-DIMM sockets, supporting 4800MHz SDRAM up to 32GB |
| Chipset | Intel® H610E |
| Graphics | Integrated Intel® Iris X ^e 1 x Intel® i226LM |
| LAN Chipset | 1 x Intel® i219LM 5 x Intel® i210AT |
| Watchdog Timer | 1~255 levels reset |
| TPM | dTPM 2.0 |
| I/O | |
| Serial Port | 1 x RS232 _(Default) /422/485 1 x RS232 |
| USB Port | 4 x USB-A 3.2 Gen1 2 x USB-A 2.0 2 x internal USB-A 2.0 |
| LAN | 1 x 2.5GbE ports 2 x GbE ports 4 x GbE PoE ports(IEEE802.3af) (For ARES-1983H-MV) |
| Video Port | 1 x DisplayPort 1.2 1 x VGA |
| Digital I/O | 16 x DI & 16 x DO w/1.5kV isolation (For ARES-1983H-MV) |
| Expansion Bus | 1 x M.2 E-key 2230 slot (PCIe 3.0 x1 + USB2.0 + CNVi) 1 x mPCIe (PCIe 3.0 x1 + USB 2.0, Full size) w/ 1 x nano SIM card slot |
| Storage | |
| Type | 1 x M.2 M-key 2242/2280 slot (PCIe x4 + SATA) 1 x 2.5" HDD/SDD internal drive bay (For ARES-1983H-MV) |

Power Requirement

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|------------------------|--|
| Power Input | DC 12~24V via 2-pin terminal block |
| Max. Power Consumption | ARES-1983H (w/ 65W TDP CPU): 110W ARES-1983H-MV(w/ 65W TDP CPU): 170W |

Environmental

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|--------------------|--|
| Operating Temp. | w/ 35W TDP CPU: -20 ~ 60 °C, ambient w/ air flow w/ 65W TDP CPU: -20 ~ 50°C, ambient w/ air flow |
| Storage Temp. | -30 ~ 70°C |
| Operating Humidity | 10-95% @ 60°C (non-condensing) |
| Vibration | 5~500Hz 3 Grms X,Y,Z axis w/SSD, according to IEC 68-2-64 10G peak acceleration (11 m sec. duration), operation |
| Shock & Crash | 30G peak acceleration (11 m sec. duration), nonoperation According to IEC 68-2-27 |

Qualification

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|---------------|-----------------|
| Certification | CE, FCC Class A |
|---------------|-----------------|

Mechanical

| | |
|------------------------|---|
| Construction | Metal + Aluminum |
| Mounting | Wall-mount (standard) DIN-rail (optional w/ CTOS bracket) |
| Weight | TBD |
| Dimensions (W x D x H) | ARES-1983H: 55 x 164 x 210mm ARES-1983H-MV: 90 x 164 x 210mm |

OS Support

Windows 10 IoT & Linux: Ubuntu

Ordering Information

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|----------------------|---|
| ARES-1983H | ARES-1983H w/ H610E Chipset, 3 x LAN, 2 x COM, 6 x USB, 1 x DP, 1 x VGA, 1 x M.2 E-Key, 1 x mPCIe & 1 x M.2 M-Key |
| ARES-1983H-MV | ARES-1983H w/ 4 x GbE PoE, 16 x isolated DI + 16 x isolated DO & 1 x 2.5" SSD/HDD tray |