

# MIG 3000

Intel® Core™ i9/i7/i5/i3 Processors (14th Gen)

Expandable AI Computing System with Discrete Graphics



^ Machine Vision



- Intel® Core™ i9/i7/i5/i3 Processors (12/13/14th Gen, Raptor/ Alder Lake) running with Intel® H610E Chipset supports max 65W TDP CPU
- 2 DDR5 4800MHz Memory supports up to 64GB
- 1 M.2 2242/2280 NVMe slot and 2 SATA III ports for storage
- Expansion : 1 M.2 2230 Key E, 1 PCIe x16 expansion supports up to 900W power budget for independent 2-slot graphics card
- DC 9V to 55V wide range power input
- Operating Temperature from 0°C to 60°C

v Medical Imaging



^ Onshore Fleet Management



Vecow

# Specifications

## System

|           |   |
|-----------|---|
| Processor | <ul style="list-style-type: none"> <li>- 24-core Intel® Core™ i9/i7/i5/i3 Processor (14th gen, Raptor Lake-S Refresh)</li> <li>- 24-core 13th Gen Intel® Core™ i9/i7/i5/i3 Processor (Raptor Lake-S)</li> <li>- 16-core 12th Gen Intel® Core™ i9/i7/i5/i3 Processor (Alder Lake-S)</li> </ul> |
| BIOS      | AMI   |
| SIO       | NCT6126D  |
| Memory    | 2 DDR5 4800MHz SO-DIMM, up to 64GB  |
| OS        | Windows 11, Windows 10, Linux   |

## I/O Interface

|        |  |
|--------|--|
| Serial | 2 COM RS-232/422/485   |
| USB    | <ul style="list-style-type: none"> <li>- 2 USB 3.2 Type-A</li> <li>- 2 USB 2.0 Type-A</li> </ul> |
| LED    | Power, HDD   |

## Graphics

|                    |  |
|--------------------|--|
| Graphics Processor | <ul style="list-style-type: none"> <li>- Intel® UHD Graphics 770/730 driven by Intel® X<sup>e</sup> Architecture</li> <li>- Independent Graphics : By request</li> </ul> |
| Interface          | <ul style="list-style-type: none"> <li>- 1 DP 1.2a : Up to 3840 x 2160 @60Hz</li> <li>- 1 HDMI 1.4 : Up to 3840 x 2160 @30Hz</li> </ul>                                  |

## Expansion

|      |   |
|------|---|
| PCIe | 1 PCIe 4.0 x16                          |
| M.2  | 1 M.2 Key E Socket (2230, PCIe x1/USB2) |

## Storage

|      |  |
|------|--|
| SATA | 2 SATA III (6Gbps)                           |
| M.2  | 1 M.2 Key M Socket (2242/2280, PCIe x4/SATA) |

## Audio

|                 |                                       |
|-----------------|---------------------------------------|
| Audio Codec     | Realtek® ALC897, 7.1 Channel HD Audio |
| Audio Interface | 1 Mic-in, 1 Line-out                  |

## Ethernet

|       |                           |
|-------|---------------------------|
| LAN 1 | Intel® I219V GigE LAN     |
| LAN 2 | Intel® I225LM 2.5GigE LAN |

## Power

|                 |                               |
|-----------------|-------------------------------|
| Power Input     | DC 9V to 55V                  |
| Power Interface | 2-pin Terminal Block : V+, V- |

## Others

|                |  |
|----------------|--|
| TPM            | Infineon SLB9670 supports TPM 2.0, SPI Interface                                 |
| Watchdog Timer | Reset : 5 to 255 sec./min. per step  |
| Smart Mgmt     | Wake on LAN supported (LAN1 only)  |
| HW Monitor     | Monitoring temperature, voltages.<br>Auto throttling control when CPU overheats. |

## Mechanical

|            |  |
|------------|--|
| Dimensions | 162.7mm x 203.0mm x 385.0mm (6.41" x 7.99" x 15.16") |
| Weight     | 5.3 kg (11.45 lb)                                    |
| Mounting   | Wallmount by mounting bracket                        |

## Environment

|                       |   |
|-----------------------|---|
| Operating Temperature | 0°C to 60°C (32°F to 147°F)   |
| Storage Temperature   | -20°C to 80°C (-4°F to 176°F)   |
| Humidity              | 5% to 90% relative humidity, non-condensing   |
| Relative Humidity     | 90% @ 60°C  |
| Shock / Vibration     | <ul style="list-style-type: none"> <li>- IEC 61373 : 2010</li> <li>- Railway Applications : Rolling Stock Equipment, Shock and Vibration Tests</li> </ul> |
| EMC                   | CE, FCC, ICES, EN50155, EN50121-3-2   |

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# Order Information

| Model    | Ethernet |        | PCIe x16 | SATA III | USB | COM | System Fan |
|----------|----------|--------|----------|----------|-----|-----|------------|
|          | 2.5G LAN | 1G LAN |          |          |     |     |            |
| MIG-3000 | 1        | 1      | 1        | 2        | 4   | 2   | Y          |

## CPU List

| Series       | CPU       | Cores | GHz | TDP (W) | CPU        | Cores | GHz | TDP (W) |
|--------------|-----------|-------|-----|---------|------------|-------|-----|---------|
| Intel® Core™ | i9-14900  | 24    | 5.8 | 65      | i9-14900T  | 24    | 5.5 | 35      |
|              | i7-14700  | 20    | 5.4 |         | i7-14700T  | 20    | 5.2 |         |
|              | i5-14500  | 14    | 5   |         | i5-14500T  | 14    | 4.8 |         |
|              | i3-14100  | 4     | 4.7 |         | i3-14100T  | 4     | 4.4 |         |
|              | i9-13900E | 24    | 5.2 |         | i9-13900TE | 24    | 5   |         |
|              | i7-13700E | 16    | 5.1 |         | i7-13700TE | 16    | 4.8 |         |
|              | i5-13500E | 14    | 4.6 |         | i5-13500TE | 14    | 4.5 |         |
|              | i3-13100E | 4     | 4.4 |         | i3-13100TE | 4     | 4.1 |         |
|              | i9-12900E | 16    | 5   |         | i9-12900TE | 16    | 4.8 |         |
|              | i7-12700E | 12    | 4.8 |         | i7-12700TE | 12    | 4.7 |         |
|              | i5-12500E | 6     | 4.5 |         | i5-12500TE | 6     | 4.3 |         |
|              | i3-12100E | 4     | 4.2 |         | i3-12100TE | 4     | 4   |         |

## Accessories

|                    |   |
|--------------------|---|
| DDR5 32G           | Certified DDR5 32GB 4800MHz RAM   |
| DDR5 16G           | Certified DDR5 16GB 4800MHz RAM   |
| DDR5 8G            | Certified DDR5 8GB 4800MHz RAM  |
| PWS-480W-WT        | 480W, 24V, 90V AC to 305V AC Power Supply, Wide-Temp, IP65                |
| PWS-600W           | 600W, 24V, 90V AC to 305V AC Power Supply                                 |
| PWS-600W-WT        | 600W, 28.8V, 90V to 305V AC Power Supply, Wide Temperature -40°C to +70°C |
| M.2 Storage Module | M.2 Key M Storage Module  |
| WiFi & Bluetooth   | WiFi & Bluetooth Module with Antenna                                      |

# Dimensions & Drawing

Unit : mm (inch)

