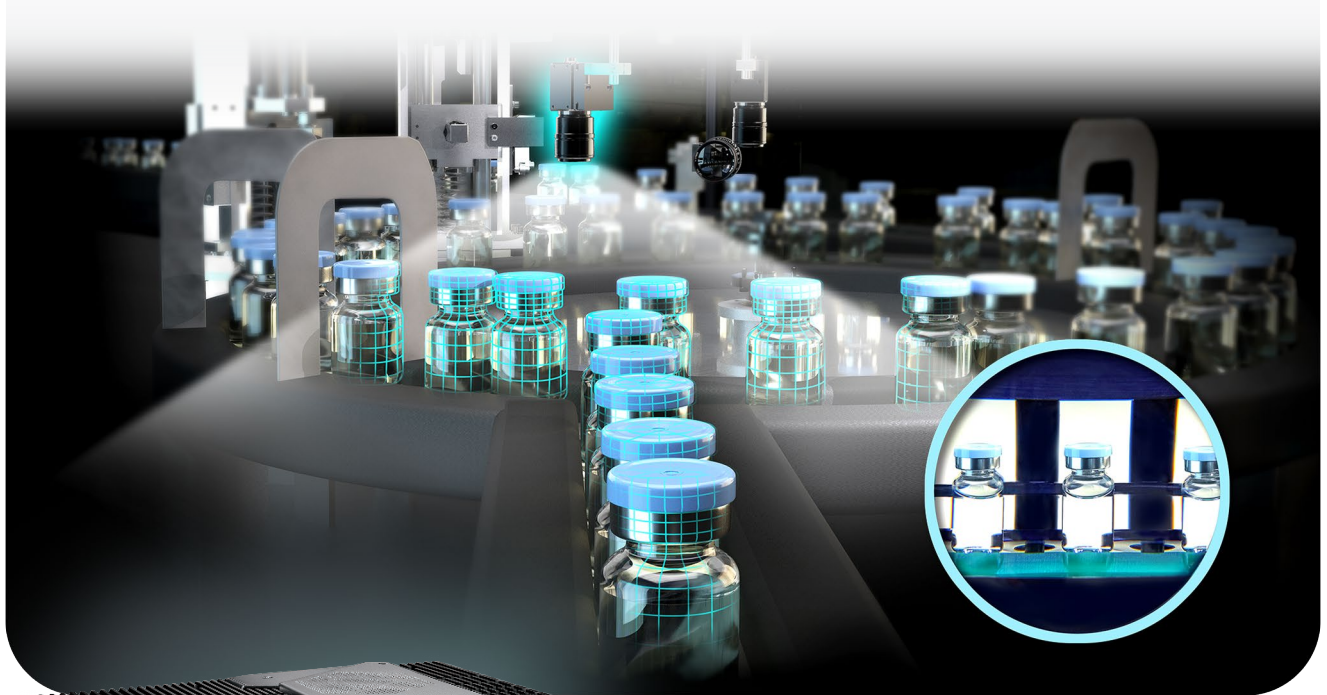


# ECX

# 2400 AI



Workstation-grade Intel® Xeon®/Core™ i9/i7/i5/i3 (Comet Lake)  
AI Computing System with Independent AI accelerators



Smart AOI



- Workstation-grade Platform :  
10-core 10th Gen Intel® Xeon®/Core™ i9/i7/i5/i3 Processor (CML-S) with Intel® W480E chipset, up to 95W TDP CPU
- Built-in independent AI accelerator card, which replaces power-hungry desktop GPU delivering low latency with excellent power productivity, supporting up to 64 TOPS
- 12V to 50V wide range DC Power Input, 80V Surge Protection
- Supports Configurable Software Ignition Control and TPM 2.0
- Optional AIoT Solution Service supports OpenVINO based AI accelerator and advanced Edge AI applications

Public Surveillance



Robotic Control



intel  
partner  
Gold  
IoT Solutions



## Vecow

# Specifications

## System

|           |                                                                  |
|-----------|------------------------------------------------------------------|
| Processor | 10th Gen Intel® Xeon®/Core™ i9/i7/i5/i3 Processor (Comet Lake-S) |
| Chipset   | Intel® W480E                                                     |
| BIOS      | AMI                                                              |
| SIO       | IT8786E                                                          |
| Memory    | 2 DDR4 2933MHz Memory, up to 64GB (ECC/Non-ECC)                  |
| OS        | Windows 10, Linux                                                |

## I/O Interface

|              |                                 |
|--------------|---------------------------------|
| Serial       | 4 COM RS-232/422/485 (ESD 8kV)  |
| USB          | 6 USB 3.2 (External)            |
| Isolated DIO | 32 Isolated DIO : 16 DI, 16 DO  |
| LED          | Power, HDD, PoE, Wireless       |
| SIM Card     | 3 External Nano SIM Card Socket |

## Expansion

|           |                                                                                                   |
|-----------|---------------------------------------------------------------------------------------------------|
| Mini PCIe | 2 Mini PCIe sockets for PCIe/USB/SIM Card/Optional mSATA                                          |
| PCIe      | 1 PCIe x4 Slot                                                                                    |
| M.2       | - 1 M.2 Key B Socket (2280/3042/3052, PCIe x2/USB3/USB2)<br>- 1 M.2 Key E Socket (2230, PCIe/USB) |

## AI Acceleration

|                |                                                       |
|----------------|-------------------------------------------------------|
| AI Accelerator | Single-core PCIe AI Inference Accelerator Card        |
|                | - Fully software programmable using AI Software Suite |
|                | - 16 Graph Streaming Processor cores                  |
|                | - 16 Int8 Inference TOPS                              |
|                | Quad-core PCIe AI Inference Accelerator Card          |
|                | - Fully software programmable using AI Software Suite |
|                | - 64 Graph Streaming Processor cores                  |
|                | - 64 Int8 Inference TOPS                              |

## Storage

|                |                                                                                   |
|----------------|-----------------------------------------------------------------------------------|
| SATA           | 4 SATA III (6Gbps) support S/W RAID 0, 1, 5, 10                                   |
| mSATA          | 2 SATA III (Mini PCIe Type, 6Gbps)                                                |
| M.2            | 1 M.2 Key M Socket (2280, PCIe x2/SATA)                                           |
| Storage Device | - 1 Micro SD Card, Push-in/Push-out Ejector<br>- 4 Front-access 2.5" SSD/HDD Tray |

## Audio

|                 |                                          |
|-----------------|------------------------------------------|
| Audio Codec     | Realtek ALC888S-VD, 7.1 Channel HD Audio |
| Audio Interface | 1 Mic-in, 1 Line-out                     |

## Ethernet

|       |                                           |
|-------|-------------------------------------------|
| LAN 1 | Intel® I219LM GigE LAN supports iAMT 14.0 |
| LAN 2 | Intel® I210 GigE LAN                      |

## PoE

|                |                                                   |
|----------------|---------------------------------------------------|
| LAN 3 to LAN 6 | GigE IEEE 802.3at (25.5W/48V) PoE* by Intel® I350 |
|----------------|---------------------------------------------------|

## Power

|                  |                                             |
|------------------|---------------------------------------------|
| Power Input      | DC 12V to 50V                               |
| Power Interface  | 3-pin Terminal Block : V+, V-, Frame Ground |
| Ignition Control | 16-mode Software Ignition Control           |
| Remote Switch    | 3-pin Terminal Block                        |
| Surge Protection | Up to 80V/1ms Transient Power               |

## Others

|                |                                                                               |
|----------------|-------------------------------------------------------------------------------|
| TPM            | Infineon SLB9665 supports TPM 2.0, LPC Interface                              |
| Watchdog Timer | Reset : 1 to 255 sec./min. per step                                           |
| Smart Mgmt.    | Wake on LAN, PXE supported                                                    |
| HW Monitor     | Monitoring temperature, voltages. Auto throttling control when CPU overheats. |

## Mechanical

|            |                                                                |
|------------|----------------------------------------------------------------|
| Dimensions | 260mm x 240mm x 104mm (10.2" x 9.4" x 4.1")                    |
| Weight     | 5.5 kg (12.13 lb)                                              |
| Mounting   | - Wallmount by mounting bracket<br>- DIN Rail Mount (Optional) |

## Environment

|                   |                                                                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Temp.   | <b>35W &amp; 65W TDP CPU</b> : -20°C to 70°C (-4°F to 157°F), with System Fan<br><b>80W &amp; 95W TDP CPU</b> : -20°C to 70°C (-4°F to 157°F), with Fan Sink and System Fan |
| Storage Temp.     | -40°C to 85°C (-40°F to 185°F)                                                                                                                                              |
| Humidity          | 5% to 95% Humidity, non-condensing                                                                                                                                          |
| Relative Humidity | 95% @70°C                                                                                                                                                                   |
| Shock/Vibration   | - IEC 61373 : 2010<br>- Railway Applications : Rolling Stock Equipment, Shock and Vibration Tests                                                                           |
| EMC               | CE, FCC, EN50155, EN50121-3-2                                                                                                                                               |

\* All product information may subject to change without prior notice.

\* The rights of all brand names, product names and trademarks belong to their respective owners.  
Copyright © 2025 Vecow Co., Ltd. All rights reserved.

# Order Information

| Model           | AI Core | TOPS | LAN  |      | PCIe | System Fan | Fan Sink |
|-----------------|---------|------|------|------|------|------------|----------|
|                 |         |      | GigE | PoE+ |      |            |          |
| ECX-2400 AI-P   | 1       | 16   | 6    | 4    | x4   | Y          | -        |
| ECX-2400F AI-P  | 1       | 16   | 6    | 4    | x4   | Y          | Y        |
| ECX-2400 AI-PQ  | 4       | 64   | 6    | 4    | x4   | Y          | -        |
| ECX-2400F AI-PQ | 4       | 64   | 6    | 4    | x4   | Y          | Y        |

\*\* Fan Sinks are required for high TDP CPU systems (80W, 95W)

## CPU List

| Series       | CPU       | GHz | TDP (W) | CPU        | GHz | TDP (W) | ECC RAM |
|--------------|-----------|-----|---------|------------|-----|---------|---------|
| Intel® Xeon® | W-1290E   | 4.8 | 95      | W-1290TE   | 4.5 | 35      | Y       |
|              | W-1270E   | 4.8 | 80      | W-1270TE   | 4.4 | 35      | Y       |
|              | W-1250E   | 4.7 | 80      | W-1250TE   | 3.8 | 35      | Y       |
| Intel® Core™ | i9-10900E | 4.7 | 65      | i9-10900TE | 4.5 | 35      | N/A     |
|              | i7-10700E | 4.5 | 65      | i7-10700TE | 4.4 | 35      | N/A     |
|              | i5-10500E | 4.2 | 65      | i5-10500TE | 3.7 | 35      | N/A     |
|              | i3-10100E | 3.8 | 65      | i3-10100TE | 3.6 | 35      | Y       |

## Accessories

|                  |                                                                                                                      |
|------------------|----------------------------------------------------------------------------------------------------------------------|
| DDR4 32G         | Certified DDR4 32GB 3200MHz RAM                                                                                      |
| DDR4 16G         | Certified DDR4 16GB 3200MHz RAM                                                                                      |
| DDR4 8G          | Certified DDR4 8GB 3200MHz RAM                                                                                       |
| DDR4 4G          | Certified DDR4 4GB 3200MHz RAM                                                                                       |
| PWA-160WB-WT     | 160W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block (7.62mm pitch), Wide Temperature -30°C to +70°C |
| PWA-180WB        | 180W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block                                                 |
| PWA-280WB-WT     | 280W, 24V, 85V AC to 264V AC Power Adapter with 3-pin Terminal Block (7.62mm pitch), Wide Temperature -30°C to +70°C |
| PWA-330WB        | 330W, 24V, 90V AC to 264V AC Power Adapter with 3-pin Terminal Block                                                 |
| PWS-480W-WT      | 480W, 24V, 90V AC to 305V AC Power Supply, Wide-Temp, IP65                                                           |
| VESA Mount       | VESA Mounting Kit                                                                                                    |
| DIN-RAIL         | DIN Rail and VESA Mounting Kit                                                                                       |
| TMK2-20P-100     | Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm                                                          |
| TMK2-20P-500     | Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm                                                          |
| TMB-TMBK-20P     | Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting                                        |
| 5G Module        | 5G Module with Antenna                                                                                               |
| 4G Module        | 4G/GPS Module with Antenna                                                                                           |
| WiFi & Bluetooth | WiFi & Bluetooth Module with Antenna                                                                                 |

# Dimensions & Drawing

Unit : mm (inch)

