

Louvar ZX12

Defence Certified Fanless Embedded Computer

Intel Intel® Alder Lake 12th Gen H Processor

KEY BENEFITS

- Fully certified for defence applications to include shock, vibration, EMC and environmental.
- Powerful Intel Alder Lake 12th Gen H Processors, with a choice of i3, i5 and i7 with DDR5 memory up to 64 GB
- Recommended for Naval fleets with all sizes of vessels including submarines.
- Suitable for ships communication networks including crews' quarters and bridge with exceptionally low noise and a high reliability design.
- Extremely compact but with excellent cool running operation.
- Data security and integrity for red and black networks using fibre connectivity and Tempest approvals.
- Unique removable SSD drawer and locking system allows data to be removed and stored securely.
- Customised configurations available.

The Louvar ZX12 replaces the highly successful ZX5 and ZX7 as a stable and reliable platform for the Navy. Designed for Windows 10 and Windows 11 operating systems. The Louvar ZX12 is the latest in high performance, 12th generation processing using the Intel Alder Lake 12th Gen H Processor processor. In standard form, it comes with an i5 processor and 32 Gb RAM and a 1 Tb removable SSD. It offers a highly engineered, compact 'defence certified' computer for naval ships and land based secure locations around the world. It can be easily deployed around the ship in areas such as the bridge or general crew's quarters. Compliant to most international Naval and DEFSTAN standards, it is designed and built for a long working life and provides an excellent return on investment. The quiet mode operation with low power and excellent cooling design enables flexible configurations in compact spaces without overheating issues. With a choice of cpu and connectivity options, the ZX12 is the ideal choice.



Model ZX12-xx



Unique removable SSD drawer and locking system



gigabit fibre port for added security



stackable modular flexible configuration using approved brackets. (Note ZX3 illustrated)



vertical mounting using custom sleeve with secure mounting.

- ✓ Defence Compliant
- ✓ Tempest (optional)
- ✓ High Performance
- ✓ Excellent ROI

Rugged, Compact, Defence Compliant, Fanless Computing

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Specifications

| Model ZX12-CM3-50 xx | |
|----------------------|---|
| CPU | Intel Core 12th Generation embedded CPU i5-12600HE 2.5GHz to 4.5GHz (Turbo) 18Mb Smart Cache |
| Memory | 32Gb DDR5 SO-DIMM 4800MHZ up to 64Gb |
| Hard drives / Disks | Hard Drive – Optional PCIe NVMe M2 SSD 500Gb and /or SATA3 (6Gb/s) 2.5" format 1Tb SSD |
| Graphics | Graphics – Intel Iris Xe Graphics. 2 x HDMI and 2 x Display Port. HDMI Max Resolution 4096 x 2304 @60Hz. Display Port Max Resolution 7680 x 4320 @ 60Hz 2 x Display Ports and 2 x HDMI |
| LAN | LAN - 1 x Intel I219-LM Gigabit PHY LAN and 2 x I226-LM Gigabit LAN (up to 2.5GbE) |
| USB | USB – 8 x USB 2.0/3.2 ports. 2 x USB 2.0 ports (Front Panel) 4 x USB 3.2 Gen2 ports and 2 x USB 2.0 (Rear I/O Panel) |
| Expansion | Expansion – 1 X PCIe x16 Slot (support Gen4 X8) , 2 x M2 Key M 2280 PCIe Gen 4 connectors, 1 x Mini PCIe (support mSATA), 1 x M2 2230 Key E |
| Serial Port | Serial Port – 2 x RS232/422/485 ports |
| Audio | Audio - Realtek ALC888S HD Audio |
| Fibre | Fibre – PCIe Gigabit plug in card (PCIe x16 Slot) |
| Operating System | Operating System – Windows 11, Windows 10 optional Linux |

| Model ZX12-CM3-50 xx | |
|----------------------|--|
| Power supply | Approved external AC power adapter supplied * |
| Input Voltage | 9–35 Volts DC |
| Mounting | Desk mount brackets. optional stacking brackets. optional rack mount |
| Dimensions | 305mm x 226mm x 64mm (excluding fibre card and front lock bezel) 320mm x 226mm x 64mm (including fibre card and front lock bezel) |
| Weight | 2.678Kg (with caddy, excluding power supply). 3.034 Kg (with caddy, including power supply) |
| Construction | Construction - Ruggedised zinc plated steel chassis (with interlocking lid) and chassis keylock |
| Operating Temp. | Operating Temp – 0 to +60 degrees C |
| Storage Temp. | Storage Temp -20 to +80 degrees C |
| Certification | see separate panel below. |
| Ordering Information | Louvar ZX12-CM3-50-i5 Defence certified computer with i5-8850H 2.60 to 4.30GHz CPU |
| Optional Accessories | 19 inch rack mounting kit Desk mounting kit Stacking ki |

either one or two system cooling fans may be used depending on application.

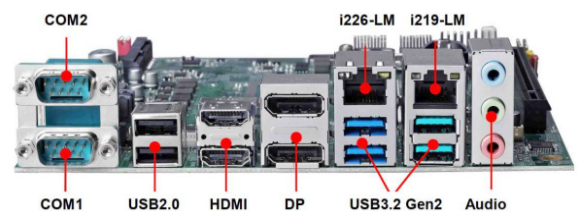
*Other certified power sources can be used with power output within the defined limits (9 to 35v).

Photos are for illustration purposes and should not be relied upon for product accuracy. Please contact our technical department for further details.

Certification

| | |
|-----------|---|
| Shock | Def Stan 08-123:2012 Datasheet 28 |
| Vibration | DEF STAN 08-123:2012 Datasheet 25 |
| Safety | IEC/EN 62368-1:2018 |
| Lloyds | Lloyds Type approval – (on request) |
| EMC | EN 55032, EN 55035, IEC 60945 Def-Stan 59-411 A2:2014, Below Decks |
| Tempest | NATO SDIP 27, Level B (on request) |
| Markings | UKCA & CE |

Technical Details



Rear panel of Louvar ZX12-xx

For a more complete list of certifications, please refer to the data-sheet or contact us: technical@primarynetworks.co.uk