

# **MINIS FORUM MS-02 Ultra Mini PC Intel Core Ultra 9 285HX barebone**



Model: MS-02 Ultra

Manufacturer: MINIS FORUM

EAN: 4897118835213

Product Code: 1418377

## **R34,559**

### **MINIS FORUM 02 Ultra MiniPC Intel Core Ultra 9 285HX CPU**

MINIS FORUM MS-02 Ultra is a miniPC that redefines the concept of performance in a small form factor. Equipped with an Intel® Core™ Ultra 9 285HX processor with 24 cores and a clock speed of up to 5.5 GHz, it is suitable for a variety of tasks. It allows for extensive expansion – three PCIe slots and four M.2 NVMe SSD connectors are available. Network connectivity is provided by two 25 GbE ports, one 10 GbE port, and one 2.5 GbE port.

### **High performance**

At the heart of the computer is an Intel Ultra 9 285HX processor, which offers 24 cores, 24 threads, and 36 MB of cache. With a TDP of up to 140W and Intel AI Boost technology, the hardware can

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

itworkup.co.za | sales@itworkup.co.za | +27 (11)541-9950

handle not only everyday tasks but also projects that require high computing power. Integrated Intel graphics with a maximum frequency of up to 2 GHz provide basic multimedia support and high-resolution image display.

## **Unlimited RAM and data storage**

The MINIS FORUM MS-02 Ultra supports up to 256 GB of DDR5 RAM, mounted in four SO-DIMM slots. Four M.2 NVMe SSD slots are provided for user data — two directly on the motherboard (PCIe 4.0 x4) and two integrated with the 25GbE NIC network card. Each slot can support a drive with a capacity of up to 8 TB, allowing you to build a very capacious and fast array with the possibility of RAID 0, 1, 5, or 10 configuration.

## **Effective cooling**

To meet the thermal requirements of such powerful components, a heat sink with six heat pipes and two fans — one with a diameter of 70 mm and the other 60 mm — have been used. Even at full load, the device maintains a maximum noise level of 46 dBA at a distance of 50 cm, which translates into comfortable operation.

## **Fast and stable network connection**

The model stands out for its connectivity flexibility. There are two 25GbE SFP+ ports based on the Intel E810 chip, one 10GbE RJ45 port (Realtek RTL8127), and one 2.5GbE RJ45 port with Intel vPro support. The whole thing is complemented by an Intel BE200 wireless card, offering Wi-Fi 7 and Bluetooth 5.4.

## **A wide selection of ports**

The front of the case features two USB4 V2 Type-C ports with 80 Gbps bandwidth and support for DisplayPort 2.0 and 15W charging, one USB-A 3.2 Gen. 2 10Gbps port, a 3.5 mm audio jack, and a power button. The rear of the device features three USB-A 3.2 Gen. 2 10 Gbps ports, one USB4 Type-C connector (40 Gbps), one HDMI 2.1 FRL, and network ports: x2 25 GbE SFP+; 10 GbE Rj45 and 2.5 GbE Rj45.

---

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

itworkup.co.za | sales@itworkup.co.za | +27 (11)541-9950

## Ready to go

The computer is powered by a built-in 350W 1U standard power supply. The model supports Windows 11 Pro and Home, and the set includes all the necessary accessories: power cord, HDMI cable, SSD heat sink, protective plate, and disassembly tool.

## Included

- mini PC
- power cord
- HDMI cable
- SSD heat sink
- protective plate
- disassembly tool
- user manual

## Basic information

|                            |                     |
|----------------------------|---------------------|
| Manufacturer               | MINIS FORUM         |
| Model                      | MS-02 Ultra         |
| Series                     | Station Mini        |
| Supported operating system | Windows 11 Pro      |
| Dimensions                 | 221.5 × 97 × 225 mm |
| Weight                     | 3.45 kg             |

## Processor (CPU)

|                     |                                       |
|---------------------|---------------------------------------|
| Model               | Intel® Core™ Ultra 9 285HX            |
| Number of cores     | 24 (8 P-Core cores + 16 E-Core cores) |
| Number of threads   | 24                                    |
| Maximum clock speed | 5.5 GHz                               |

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

**Intel® Smart Cache** 36 MB

**TDP** 100W PL1 / 140W PL2

**TDP (with dedicated graphics card)** 90W PL1 / 110W PL2

## Graphics card (GPU)

**Integrated graphics** Intel® Graphics

**Base frequency** 300 MHz

**Maximum dynamic frequency** 2 GHz

## AI engine (Intel® AI Boost)

**NPU computing power** Up to 13 TOPS

## RAM

**Slots** 4 × DDR5 SO-DIMM (ECC support, no XMP/OC support)

**Maximum speed** Up to 4800 MT/s (for 1R single-row memory), up to 4400 MT/s (for 2R double-row memory)

**Maximum capacity** 256 GB

## Storage

2 × M.2 2280 NVMe SSD (PCIe 4.0 x4, up to 8 TB each)

**Available slots** 2 × M.2 2280 NVMe SSD (integrated with 25GbE NIC; supports up to 8 TB/slot – PCIe 3.0 x4 or up to 4 TB/slot – PCIe 4.0 x4)

---

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

itworkup.co.za | sales@itworkup.co.za | +27 (11)541-9950

**Factory configurations**

No drive, 1 TB, 2 TB

**Cooling**

**CPU heat sink** Heat sink with six heat pipes and PCM paste

**Fans** 1 × 70 × 25 mm  
1 × 60 × 20 mm

**Maximum rotational speed** 5000 rpm

**Noise level (no load)** 36 dBA (at a distance of 50 cm)

**Noise level (at 100% load)** 46 dBA (at a distance of 50 cm)

**Wireless connectivity**

**Module** Intel® BE200

**Wi-Fi** Wi-Fi 7

**Bluetooth** 5.4

**Built-in ports**

2 × 25 GbE SFP+ (Intel E810)

**LAN / network ports** 1 × 10 GbE RJ45 (Realtek RTL8127)

1 × 2.5 GbE RJ45 (Intel I226-LM, Intel vPro support)

1 × HDMI™ 2.1 FRL (8K@60Hz, 4K@120Hz)

**Video outputs** 1 × USB4 with DisplayPort Alt Mode (8K@60Hz, 4K@120Hz)

2 × USB4 V2 with DisplayPort Alt Mode (8K@60Hz, 4K@120Hz)

|                      |                              |
|----------------------|------------------------------|
| <b>Audio outputs</b> | HDMI × 1                     |
|                      | USB4 × 1                     |
|                      | USB4 V2 × 2                  |
|                      | 3.5 mm jack × 1              |
| <b>Audio input</b>   | 1 × 3.5 mm combo jack (TRRS) |

## I/O ports (Connectors)

|                            |                                                                                                        |
|----------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Rear connectors</b>     | 2 × 25GbE SFP+ (Intel E810)                                                                            |
|                            | 1 × 10GbE RJ45 (Realtek RTL8127)                                                                       |
|                            | 1 × 2.5GbE RJ45 (Intel I226-LM, vPro)                                                                  |
|                            | 1 × HDMI™ 2.1 FRL                                                                                      |
|                            | 1 × USB4 Type-C (40 Gbps, DP 2.0, 15W PD)                                                              |
|                            | 3 × USB-A 10Gbps (USB 3.2 Gen 2)                                                                       |
| <b>Front connectors</b>    | 2 × USB4 V2 Type-C (80 Gbps, DP 2.0, 15W PD)                                                           |
|                            | 1 × USB-A 10Gbps (USB 3.2 Gen 2)                                                                       |
|                            | 1 × 3.5 mm audio jack                                                                                  |
|                            | 1 × Power button                                                                                       |
| <b>Internal connectors</b> | 1 × PCIe 5.0 x16                                                                                       |
|                            | 1 × PCIe 4.0 x4                                                                                        |
|                            | 1 × PCIe 4.0 x16 (with factory-installed 25GbE NIC card and 2 M.2 slots – not available for expansion) |

## Components mounted on the main panel

|                                   |                |
|-----------------------------------|----------------|
| <b>Button</b>                     | Clear CMOS × 1 |
| <b>Diagnostic LED (debug LED)</b> | CPU × 1        |
|                                   | RAM × 1        |
|                                   | VGA × 1        |
|                                   | BOOT × 1       |

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

## Other features

**VESA mounting** Not supported

**Kensington Security Slot** Yes

## Power supply

**AC input** 100–240V ~6A 50–60Hz

**Power supply** Built-in, 350W, standard 1U

GPSR Link: [https://psr-assets.innpro.pl/it\\_accessories/sg\\_it\\_accessories\\_others.pdf](https://psr-assets.innpro.pl/it_accessories/sg_it_accessories_others.pdf), Gross weight: 4530, Net weight: 3480, Box length: 33,50, Box width: 29,00, Box height: 15,50

---

The product information provided is for reference purposes only. Technical specifications, photos, descriptions and prices may change without prior notice. The manufacturer and seller are not responsible for possible data discrepancies or typographical errors. We recommend checking the current information before purchasing.

itworkup.co.za | sales@itworkup.co.za | +27 (11)541-9950