



MobiPad nBOX MD12-V2 v.1 - Barebones industrial desktop computer with WiFi 5 as standard, Intel Core i3-1215U



<b>Category:</b>	MiniPC Industry
<b>Manufacturer:</b>	Mobilator
<b>Supported OS:</b>	Windows 11, Windows 10, Linux
<b>Installed OS:</b>	Windows 11 PRO (optional)
<b>Chipset:</b>	Intel Alder Lake-U
<b>CPU Support:</b>	12th and 13th generation Intel Core
<b>Installed CPU:</b>	Intel Core i3-1215U
<b>Graphic Card:</b>	Intel UHD Graphics
<b>Memory Support:</b>	DDR4
<b>Installed Memory:</b>	None 8GB (optional)
<b>Storage (HDD) Support:</b>	SSD M.2 - NVMe
<b>Installed Storage (HDD):</b>	None 128GB   256GB   512GB (optional)
<b>IP Norm:</b>	None
<b>Temp:</b>	-20°C ~ +55°C
<b>Storage temperature:</b>	-20°C ~ +70°C

<b>Humidity:</b>	5% - 95%
<b>Others:</b>	Color black
<b>LAN:</b>	2x RJ45 2.5Gbe LAN (Intel I225-V/I226-V chip)
<b>Wireless LAN card:</b>	Wi-Fi 5   WiFi 6E (optional)
<b>3G:</b>	No
<b>4G LTE:</b>	No
<b>Bluetooth:</b>	Yes
<b>Rear Panel (ports):</b>	3x HDMI 2.0b   DisplayPort 1.4a   2x LAN 2.5G   2x COM (RS232/RS485) 2x USB 2.0   DC-IN
<b>Front Panel (ports):</b>	USB-C 3.0   4x USB 3.0   2x USB 2.0   MIC IN   Line-out   Power + LED
<b>Expansion:</b>	Adapter   HDMI cable   VESA mount   WiFi Antenna
<b>Power:</b>	100-240V AC - 19V DC / 3.42A
<b>Watch Dog Timer:</b>	Yes
<b>CD/DVD Drive:</b>	None
<b>TV Tuner:</b>	No
<b>Dimensions:</b>	174 x 125 x 43 mm
<b>Fanless:</b>	Yes
<b>Weight:</b>	980g

**1 903,67 zł**  
net price: 1 547,70 zł

# MobiPad nBOX MD12-V2



## SPECIFICATION

## CONNECTIVITY AND COMMUNICATION

## RESISTANCE AND DURABILITY

## APPLICATION

## AVAILABLE VERSIONS

The MobiPad nBOX MD12-V2 industrial mini PCs are fully operational in demanding, dusty environments, ensuring completely silent operation anywhere. The durable MobiPad nBOX MD12-V2 utilizes a passive cooling system and a metal chassis that dissipates heat without the need for fans or other moving parts. This reliable unit, powered by the powerful Intel Core i3-1215U processor from the Alder Lake-U family, is designed for continuous 24/7 operation, supported by an automatic restart function upon power restoration. These technical solutions make the device an optimal choice for professional control systems and modern workspaces.

## Small dimensions



The compact design, measuring 174 x 125 x 43 mm, significantly saves space and allows for easy portability.

## Lightweight construction



At just 0.98 kg, the MobiPad nBOX MD12-V2 easily fits into a bag or backpack for transport.

## Efficient processor



The MobiPad nBOX MD12-V2 leverages the power of an Intel Core i3-1215U processor, ensuring smooth multitasking while maintaining high system responsiveness.

## Wireless Networking



A modern Wi-Fi module ensures lightning-fast and stable wireless connectivity.

## Quick Start



A high-quality M.2 NVMe SSD significantly reduces the loading time of the operating system and all installed applications.

## Passive Cooling



The use of a fanless passive cooling system guarantees silent operation in everyday use.

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# SPECIFICATION

MobiPad nBOX MD12-V2	
Processor	Intel Core i3-1215U
Operating system	Supported: Windows 11, Windows 10, Linux
RAM DDR4	None 8GB * (optional)
Hard Disk SSD M.2	None 128GB *   256GB *   512GB * (optional)
Communication	WiFi 5   WiFi 6E* (optional)   Bluetooth

## MobiPad nBOX MD12-V2

Connectors - front	1x USB-C 3.0   4x USB 3.0 microphone input (MIC IN)   line output (Line out)
Connectors - side	1x RS232 ** (can be converted to RS485) 1x RS485 ** (can be converted to RS232)
Connectors - rear	3x HDMI 2.0b   1x DisplayPort 1.4a   2x LAN   2x USB 2.0 1x DC IN
Dimensions	174x125x43mm
Weight	980g
Graphics card	Intel UHD Graphics
Colors available	Black (Metal Housing)

\* Optional equipment available only in the appropriate product versions or upon request.

\*\* When ordering, a selection of two COM connector variants is available: 1x RS232 and 1x RS485 or dual sets 2x RS232 or 2x RS485.



Detailed device specification is available in the "Technical data".

### Efficient Processor

The powerful MobiPad nBOX MD12-V2 is powered by a modern and energy-efficient Intel Core i3-1215U processor from the Alder Lake-U family with a TDP of 15W. This device boasts 6 cores and 8 threads, clocked at up to 4.4GHz, allowing for efficient management of multiple processes simultaneously while

maintaining a smooth, fanless operation.

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## Passive Cooling

The professional MobiPad nBOX MD12-V2 utilizes a highly efficient, passive fanless cooling system, built around a durable all-metal chassis. This mechanism relies on the natural dissipation of heat energy through the device's external structure directly to the surrounding environment, eliminating fans and any moving parts.

## Dimensions

The compact metal casing, measuring 174 x 125 x 43 mm, makes the versatile MobiPad nBOX MD12-V2 suitable for a wide range of applications in digital office spaces and harsh industrial environments. Its fanless design allows for placement in almost any location, while full VESA compatibility allows for quick and easy attachment to the back of a monitor, ensuring maximum space savings and optimized workspace. Weighing less than a kilogram, this computer, powered by an Intel Core i3-1215U processor, provides a solid foundation for modern all-in-one systems, while offering high resistance to dust and dirt.



<b>Dimensions</b>	174mm x 125mm x 42mm
<b>Net weight</b>	980g

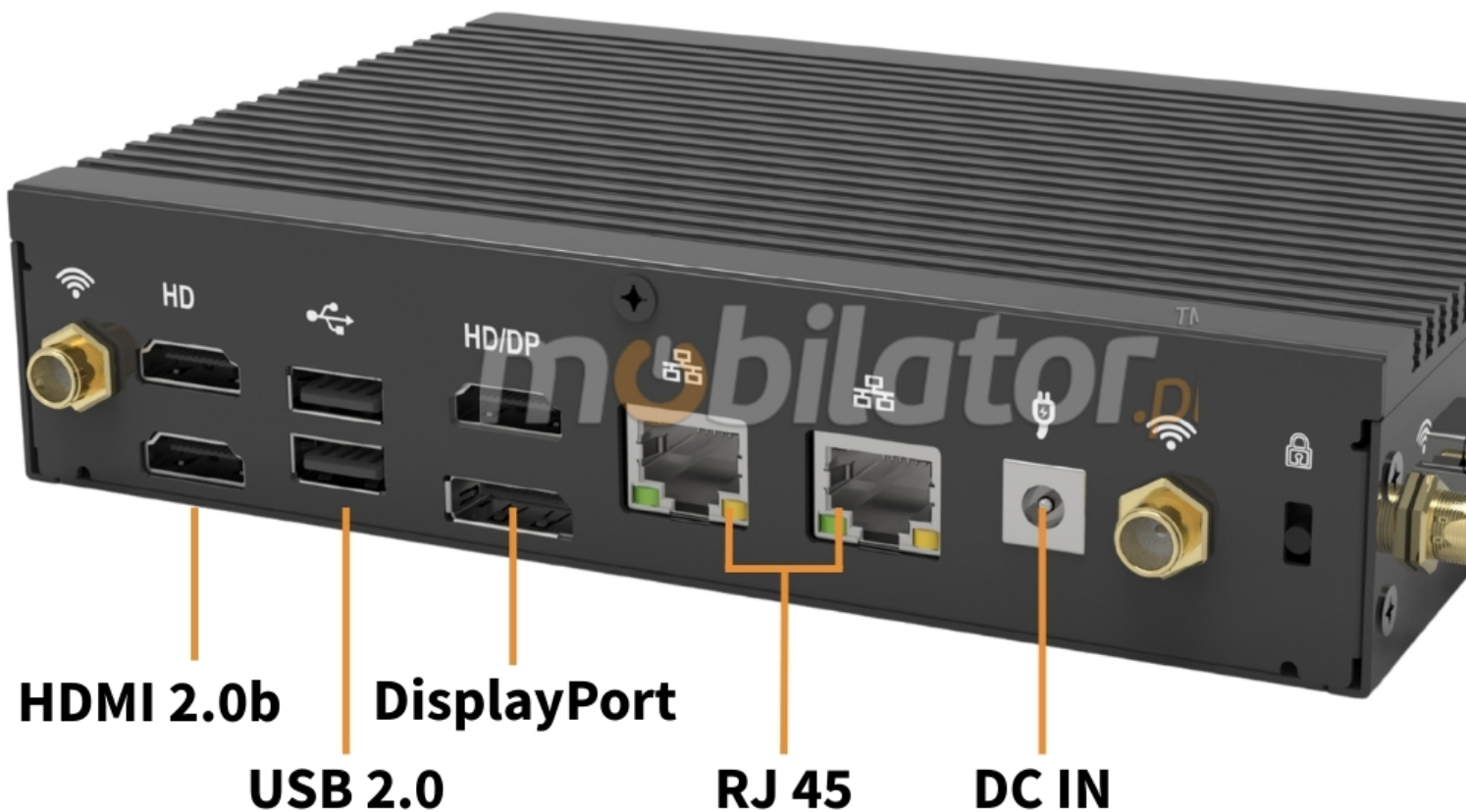
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## Connectors and Buttons

The multifunctional MobiPad nBOX MD12-V2 features a well-equipped front panel that allows for the rapid integration of essential peripherals in demanding work environments. The robust front panel houses the power button, four high-speed USB 3.0 ports, and one modern USB 3.0 Type-C port. This design also includes independent audio connectors for a microphone and a sound

connector, facilitating precise adaptation of the workstation to the operational tasks being performed. A key communication element is the side interface panel, which houses two serial COM ports. It is possible to individually create an optimal layout tailored to infrastructure requirements, offering the option of exchanging RS232 ports for RS485 and RS485 for RS232, enabling a set of two RS232 ports or two RS485 ports, or a mixed combination with one RS232 port and one RS485 port, significantly expanding the integration potential with specialized industrial equipment.





The modern MobiPad nBOX MD12-V2 features a 19V DC IN power input on the rear panel, ensuring stable operation of the Intel i3-1215U processor-based unit. This section of the device integrates dual RJ45 network connectors with high-bandwidth 2.5GbE. Extensive display capabilities are provided by three HDMI 2.0b ports and one DisplayPort 1.4a port. Two additional USB 2.0 ports complement the connectivity options, making it easy to connect basic control accessories without occupying the high-speed connectors located on the front of the metal casing.

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## CONNECTIVITY AND COMMUNICATION

## WiFi5 wireless network | (WiFi 6E) \*

The reliable MobiPad nBOX MD12-V2 ensures stable wireless connectivity thanks to a dedicated M.2 2230 E key port, which supports the modern Wi-Fi ac and Wi-Fi ax 6/6E networking standards. These technologies, combined with the included antennas, guarantee lightning-fast and reliable data transmission even in heavily loaded office or production network environments.

\* The device is available in a configuration with the WiFi 6E option.

## Wired LAN

The modern MobiPad nBOX MD12-V2 is equipped with two integrated network cards based on Intel I225-V or I226-V chipsets, supporting the 2.5GbE LAN standard. This solution, implemented in a device with an Intel i3-1215U processor, allows for significantly higher throughput than the traditional Gigabit Ethernet interface, ensuring instant data transfer and stable communication in complex industrial environments. The dual RJ45 ports enable the operation of two independent networks or the configuration of a redundant connection, significantly increasing security and ensuring uninterrupted system operation. The network interfaces also support Wake-On-Lan and PXE functions, significantly simplifying remote management of the unit in complex network environments.

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### Mechanical Damage

The use of a passive heat dissipation system combined with a modern M.2 NVMe SSD carrier makes the high-quality MobiPad nBOX MD12-V2 highly resistant to vibrations and mechanical damage.



The future-proof MobiPad nBOX MD12-V2 features a metal housing that actively acts as a heat sink and ensures efficient heat dissipation from the device's interior. The specialized structure, measuring 174 x 125 x 43 mm, effectively protects the integrated components from external factors, ensuring trouble-free system operation in harsh industrial environments.

## Extreme Temperatures

The durable MobiPad nBOX MD12-V2 is fully prepared for continuous operation in demanding thermal environments, maintaining operational stability within a wide range of -20°C to 55°C. The use of a metal housing with heat sink properties allows for efficient heat dissipation from the Intel Core i3-1215U processor with a 15W TDP without the need for active cooling components. The adopted design specifications ensure that this specialized industrial unit ensures reliable operation in locations exposed to variable and difficult temperature conditions, while guaranteeing high operating culture typical of low-power systems.

<b>Operating Temperature</b>	-20°C to 55°C
<b>Temperature Storage</b>	-20°C to 70°C
<b>Humidity</b>	5% to 95%

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## APPLICATIONS

### Retail and Services

The compact MobiPad nBOX MD12-V2 is an excellent choice for the retail and logistics industry, significantly simplifying daily invoicing and sales documentation management. Its robust, fanless metal housing ensures

completely silent operation, resulting in greater comfort in customer service environments. A VESA mount is included, allowing the device to be conveniently hidden behind a monitor, under a desk, or at the checkout. This proven solution saves valuable space in stores, production halls, and delivery vehicles.



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Warehouse and Logistics

The multi-functional MobiPad nBOX MD12-V2, leveraging the processing power of an Intel Core i3-1215U processor, enables the simultaneous operation of multiple warehouse management systems and advanced logistics applications. Its durable metal casing ensures long-term, trouble-free operation in dusty environments, maintaining full operational stability across a wide temperature range. Thanks to its 6-core and 8-thread architecture, this unit ensures smooth processes while maintaining a low power consumption of 15W. This technical specification makes the device a solid foundation for modern distribution centers, where reliability and resistance to harsh outdoor conditions are key.



## Transportation and Automotive

The innovative MobiPad nBOX MD12-V2 is highly useful in the transportation sector due to its stable power supply via a 19V DC IN input. The unit is used in cars, buses, trains, and airplanes, where it supports passenger information systems and enables real-time diagnostics of vehicle parameters.



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More photos in full resolution available in the "Gallery".

### AVAILABLE VERSIONS

The flexible MobiPad nBOX MD12-V2 is available in a variety of hardware variants, allowing for precise adjustment of parameters to specific design requirements. Selecting the appropriate code from the list provides an immediate link to the full technical specifications of the selected model. If components not included in the standard range are required, a dedicated hardware configuration can be prepared based on a separate request, ensuring full implementation of non-standard technological requirements without sacrificing high performance.

	v.1	v.2	v.3	v.3.1	v.4
Windows 11 PRO	—	—	—		—
WiFi 6E	—	—			—
8GB RAM	—				
128GB SSD M.2 -NVMe	—		—	—	—
256GB SSD M.2 -NVMe	—	—			—
512GB SSD M.2 -NVMe	—	—	—	—	