



MobiPad nBOX MK12F-V2-I7 v.3 - Modern, efficient processor in a Mini PC for production control, 8GB RAM and 512GB SSD, WiFi 6E, USB-C, 4x USB 3.0



Category:	MiniPC Industry
Manufacturer:	Mobilator
Supported OS:	Windows 11, Windows 10, Linux
Installed OS:	Windows 11 PRO (optional)
Chipset:	Intel Alder Lake-U
CPU Support:	12th and 13th generation Intel Core
Installed CPU:	Intel Core i7-1255U
Graphic Card:	Intel Iris Xe Graphics
Memory Support:	DDR4
Installed Memory:	8GB RAM 16GB 32GB (optional)
Storage (HDD) Support:	SSD M.2 - NVMe
Installed Storage (HDD):	512GB SSD M.2 - NVME 1TB 2TB (optional)
IP Norm:	None
Temp:	-20°C ~ +55°C
Storage temperature:	-20°C ~ +70°C
Humidity:	5% - 95%
Others:	Color black
LAN:	2x RJ45 2.5Gbe LAN (Intel I225-V/I226-V chip)
Wireless LAN card:	WiFi 6E

3G:	No
4G LTE:	No
Bluetooth:	Yes
Rear Panel (ports):	3× HDMI 2.0b 1× DisplayPort 1.4a 2× LAN 2.5G 2× COM (RS232/RS485) 2× USB 2.0 Phoenix connector DC-IN
Front Panel (ports):	USB-C 3.0 4× USB 3.0 2× USB 2.0 MIC IN Line-out Power + LED
Expansion:	Adapter HDMI cable VESA mount WiFi Antenna
Power:	100-240V AC - 19V DC / 3.7A
Watch Dog Timer:	Yes
CD/DVD Drive:	None
TV Tuner:	No
Dimensions:	186 x 128 x 67 mm
Fanless:	Yes
Weight:	1,63kg

923,61 €

net price: 750,90 €

MobiPad nBOX MK12F-V2- 17



SPECIFICATION

CONNECTIVITY AND COMMUNICATION

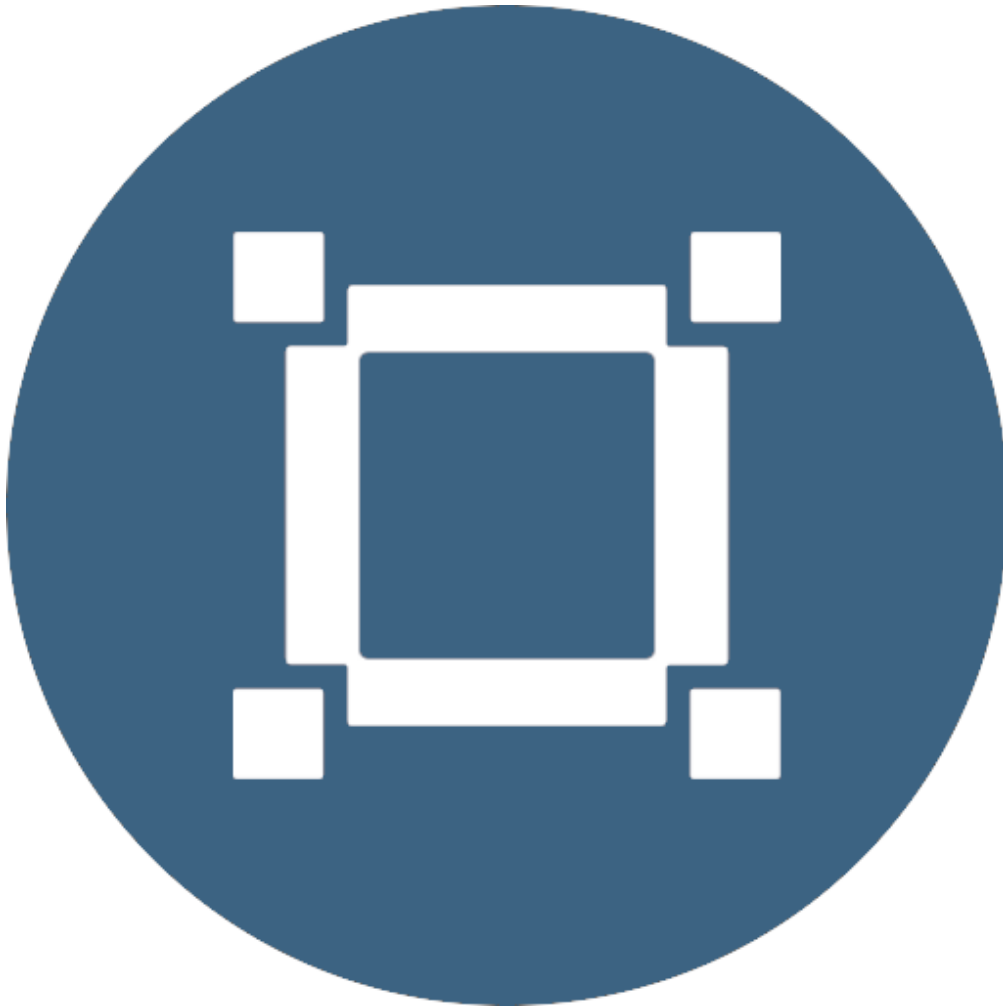
RESISTANCE AND DURABILITY

APPLICATION

AVAILABLE VERSIONS

These compact industrial units excel in harsh, dusty conditions, offering completely silent operation in any work environment. The robust MobiPad nBOX MK12F-V2-I7 features fanless passive cooling and a metal chassis that effectively dissipates accumulated heat without the use of moving parts. This rugged device, powered by Intel Core Alder processors, is designed for 24/7 continuous operation, supported by the Auto Power On function, making it an ideal solution for advanced industrial installations and modern office workstations.

Small dimensions



The compact dimensions of the design allow for significant space savings and easy movement of the computer.

Lightweight construction



The low weight of only 1.63 kg makes the device easy to fit in a bag or backpack when traveling.

Efficient processor



Thanks to the use of a powerful Intel Core i7 processor, the user receives smooth operation of multiple tasks simultaneously.

Wireless Networking



The integrated Wi-Fi module guarantees instant wireless connection to the network anywhere.

Quick Start



A modern M.2 SSD drive that dramatically reduces system and application loading times.

Passive Cooling



Maintains the highest level of performance and absolute silence during everyday use.

[up...](#) [menu...](#)

SPECIFICATION

MobiPad nBOX MK12F-V2-I7

Processor	Intel Core i7-1255U
Operating system	Supported: Windows 11, Windows 10, Linux

MobiPad nBOX MK12F-V2-I7

RAM DDR4	8GB 16GB * 32GB * (optional)
Hard Disk SSD M.2	512GB 1TB * 2TB * (optional)
Communication	WiFi 6E Bluetooth
Connectors - front	1x USB-C 3.0 4x USB 3.0 2x USB 2.0 microphone input (MIC IN) line output (Line out)
Connectors - rear	3x HDMI 2.0b 1x DisplayPort 1.4a 2x LAN 2x USB 2.0 2x COM ** (a choice of 2x RS232 or 2xRS485 or 1xRS232 and 1x RS485)
Dimensions	186x128x67mm
Weight	1.63kg
Graphics card	Intel Iris Xe 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: 2x RS232, 2x RS485, or a mixed set (1x RS232 and 1x RS485).



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

Efficient Processor

The advanced MobiPad nBOX MK12F-V2-I7 is equipped with modern and energy-efficient 12th-generation Intel Core i7 processors. Up to ten integrated cores

operate within this unit, allowing for efficient management of multiple processes simultaneously while maintaining a high level of performance. Hybrid architecture allows for intelligent allocation of cache resources between individual cores based on their current load, which translates directly into shorter communication times with the DDR4 RAM. This technological solution ensures stability and high system responsiveness even in demanding industrial environments, where smooth operation and efficiency under heavy loads are crucial.

[up...](#) [menu...](#)

Passive Cooling

The innovative MobiPad nBOX MK12F-V2-I7 utilizes an effective, passive fanless cooling system, which is based on a durable metal casing. This system relies on the automatic transfer of heat through the device's external structure to the surrounding environment, completely eliminating the use of fans or other moving parts. This design ensures absolutely silent operation, reduces the risk of mechanical failure, and offers high resistance to dust and dirt, allowing for complete stability in varying temperatures while simultaneously conserving the energy of Alder Lake processors.

Dimensions

The compact metal housing makes the functional MobiPad nBOX MK12F-V2-I7

widely applicable in digital office spaces and harsh industrial environments. The fanless design allows for placement in almost any location, while full VESA compliance allows for quick mounting of the unit to the back of a monitor, ensuring maximum space savings and optimized workspace.



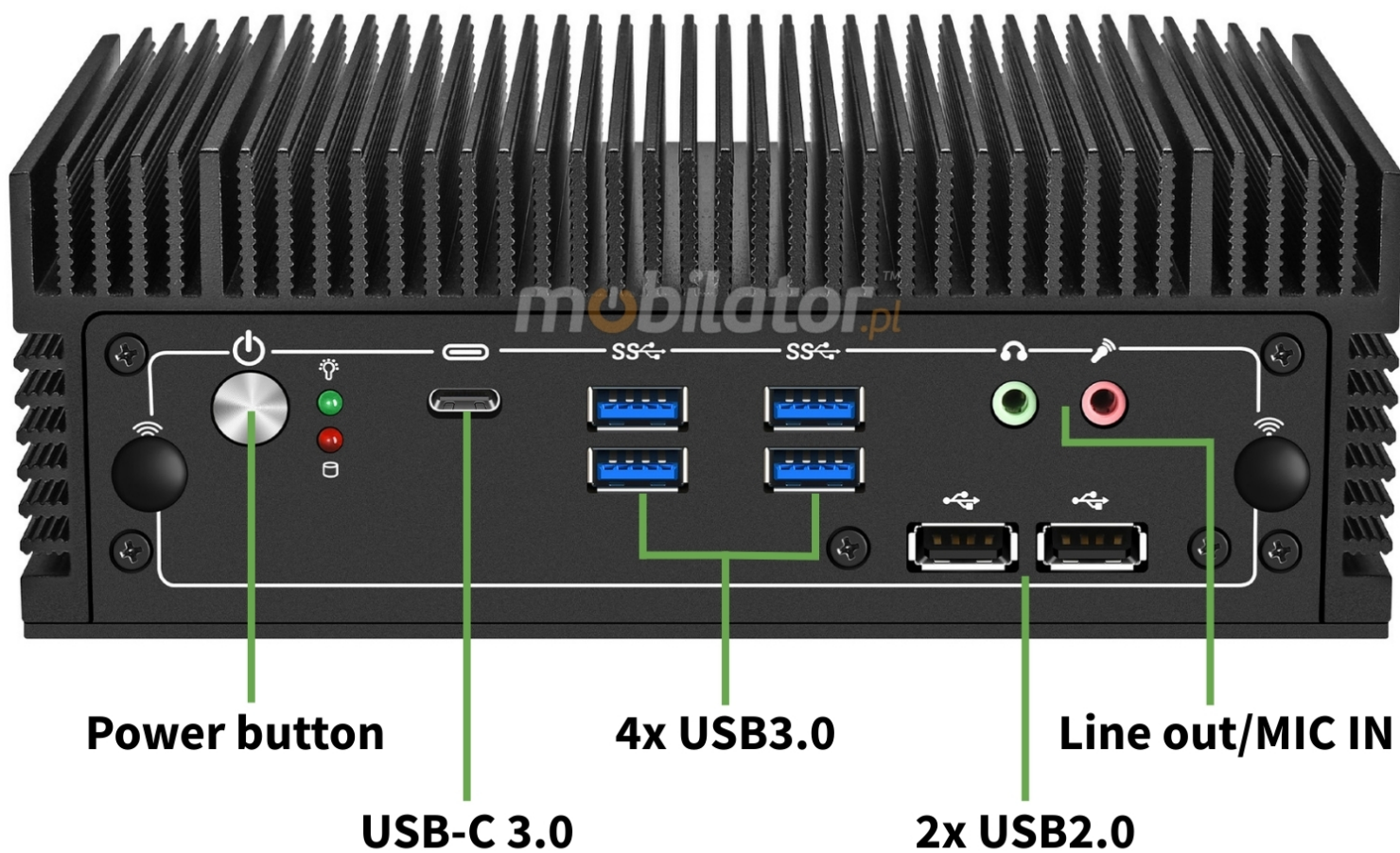
Dimensions	186mm x 128mm x 67mm
Net weight	1630g

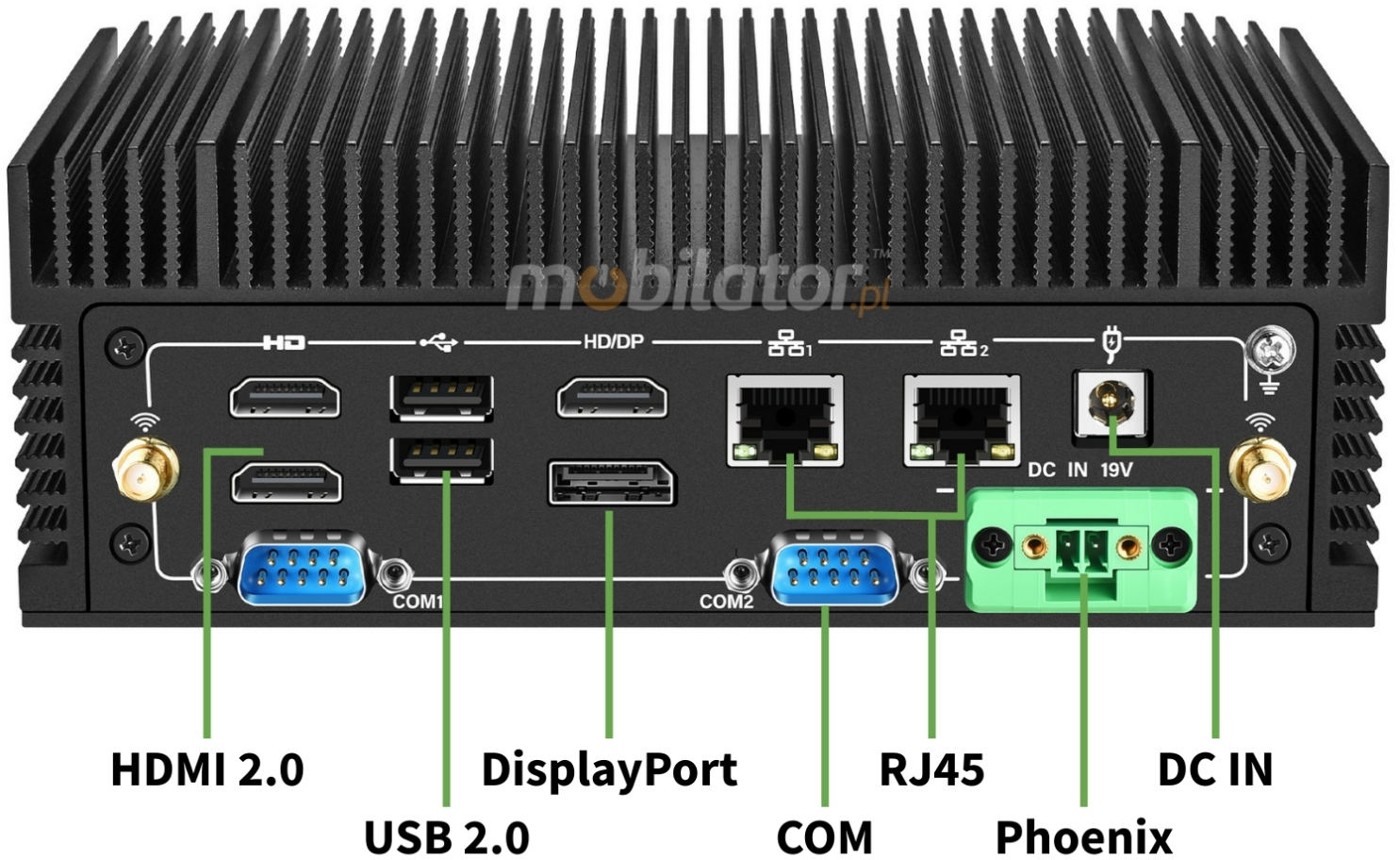
[up...](#) [menu...](#)

Connectors and Buttons

The versatile MobiPad nBOX MK12F-V2-I7 features an extensive front panel that

allows for instant connection of external accessories in demanding work environments. The durable metal front panel, in addition to the power switch and LED indicators, houses a modern USB-C 3.0 port, four high-performance USB 3.0 ports, and two standard USB 2.0 ports. The unit's designers also included separate audio inputs for a microphone and headphones, allowing for flexible hardware configuration adjustments to specific operations and the operator's individual requirements.





The professional MobiPad nBOX MK12F-V2-I7 computer features a built-in DC IN power input, a Phoenix terminal, dual RJ45 2.5GbE LAN network connectors, three HDMI 2.0b video outputs, a DisplayPort 1.4a port, and an additional USB 2.0 port. **This hardware offers significant flexibility in terms of configuration, offering the option to specify the preferred standard for the two COM ports during the ordering process: dual RS232 connectors, two RS485 inputs, or a mixed configuration of one RS232 and one RS485 interface.** This design facilitates precise adaptation of the unit to the stringent technological requirements of various industrial sectors.

[up...](#) [menu...](#)

CONNECTIVITY AND COMMUNICATION

WiFi 6E wireless network

The versatile MobiPad nBOX MK12F-V2-I7 guarantees a reliable wireless connection thanks to the integrated M.2 2230 E Key connector, supporting current Wi-Fi network protocols. This model boasts lightning-fast and reliable data transfer, enabling seamless operation even in heavily loaded office and production network environments.

Wired LAN

The multi-purpose MobiPad nBOX MK12F-V2-I7 features two integrated Intel I225-V/1226-V network cards that support the 2.5GbE LAN standard. This solution allows for twice the throughput of a traditional Gigabit Ethernet interface, resulting in instant packet transmission and stable connectivity in complex industrial environments. The dual RJ45 ports enable parallel operation of separate networks or the creation of a redundant connection, directly improving the security and operational continuity of the entire system.

[up...](#) [menu...](#)

RESISTANCE AND DURABILITY

Mechanical Damage

The implementation of a fanless cooling system combined with a powerful M.2 NVMe SSD makes the durable MobiPad nBOX MK12F-V2-I7 highly resistant to vibrations and all types of mechanical damage. The complete lack of moving parts inside the structure translates into the device's high resistance to shocks, which allows for stable operation in places exposed to intense vibrations while maintaining the complete safety of components and data.



A key feature of the durable MobiPad nBOX MK12F-V2-I7 is its metal construction, which acts as a heat sink, ensuring highly efficient heat dissipation. The specialized design of the housing, with its specific dimensions, effectively shields the internal components from external factors and enables stable operation in demanding and harsh operating environments.

Extreme Temperatures

The rugged MobiPad nBOX MK12F-V2-I7 is fully adapted to continuous operation in extreme temperatures, ensuring stable operation within a wide range from -20°C to 55°C. The robust metal housing and passive cooling system enable effective heat dissipation even under full load of modern Intel Core processors. These technical parameters ensure this industrial computer guarantees full operational efficiency in the most demanding environments, characterized by rapid and frequent changes in ambient thermal conditions.

Operating Temperature	-20°C to 55°C
Temperature Storage	-20°C to 70°C
Humidity	5% to 95%

[up...](#) [menu...](#)

APPLICATIONS

Retail and Services

The ergonomic MobiPad nBOX MK12F-V2-I7 is an optimal solution for the trade and logistics sectors, and its compact size facilitates invoicing and sales documentation. Its fanless, metal construction ensures comfortable and silent operation in direct customer service areas, eliminating unnecessary noise in the workplace. The included VESA mount (70x70/100x100 mm) allows for efficient mounting at the checkout counter, under a desk, or directly on the back of a

monitor, allowing for better use of available space in stores, production halls, and delivery vehicles.



[up...](#) [menu...](#)

Warehouse and Logistics

The advanced MobiPad nBOX MK12F-V2-I7, thanks to the high computing power of a 12th generation Intel Core processor, allows for the simultaneous support of multiple warehouse management systems. Its durable housing ensures long-term and trouble-free operation in dusty conditions, ensuring full operational stability across a range of temperature ranges.



Transportation and Automotive

The high-quality MobiPad nBOX MK12F-V2-I7 demonstrates high utility in the transportation sector due to its wide DC IN voltage range. The unit is suitable for use in cars, buses, trains, and airplanes, supporting passenger information systems and enabling real-time diagnostics of vehicle parameters. Its compact metal housing allows for installation in confined spaces, while the fanless cooling system ensures complete operational reliability even under constant vibration.



[up...](#) [menu...](#)



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

AVAILABLE VERSIONS

The customizable MobiPad nBOX MK12F-V2-I7 is available in numerous hardware versions, allowing for precise selection of the unit to precisely meet specific project needs. Selecting a specific configuration number from the provided list automatically redirects you to a detailed technical description of that variant. For requirements beyond the standard range, a custom specification can be developed to meet the user's unique requirements.

	v.1	v.2	v.3	v.4	v.4.1	v.5
WiFi 6E	—	+	+	+	+	+

Windows 11 PRO	—	—	—	—	+	—
8GB RAM	—	+	+	—	—	—
16GB RAM	—	—	—	+	+	+
32GB RAM	—	—	—	—	—	—
256GB SSD M.2 -NVMe	—	+	—	—	—	—
512GB SSD M.2 -NVMe	—	—	+	—	—	+
1TB SSD M.2 -NVMe	—	—	—	—	—	—
2TB SSD M.2 -NVMe	—	—	—	—	—	—
256GB + 1TB SSD M.2 -NVMe	—	—	—	+	+	—
512GB + 2TB SSD M.2 -NVMe	—	—	—	—	—	—
	v.6	v.7	v.7.1	v.8	v.9	
WiFi 6E	+	+	+	+	+	
Windows 11 PRO	—	—	+	—	+	
8GB RAM	—	—	—	—	—	
16GB RAM	+	—	—	—	—	
32GB RAM	—	+	+	+	+	
256GB SSD M.2 -NVMe	—	—	—	—	—	
512GB SSD M.2 -NVMe	—	—	—	—	—	
1TB SSD M.2 -NVMe	+	+	+	—	—	

2TB SSD M.2 -NVMe	—	—	—	+	—	
256GB + 1TB SSD M.2 -NVMe	—	—	—	—	—	
512GB + 2TB SSD M.2 -NVMe	—	—	—	—	+	