



MobiPad nBOX MC8F-4C2L v.5 - Versatile industrial desktop Mini PC with WiFi 6E connectivity, 2x RS232, MIC, Jack ports, 2x Gigabit LAN ports, and 16GB DDR4 RAM + 512GB M.2 SSD



Category:	MiniPC Industry
Manufacturer:	Mobilator
Supported OS:	Windows 11, Windows 10, Linux
Installed OS:	Windows 11 PRO (optional)
Chipset:	Intel 10th Gen CPU Comet lake-U
CPU Support:	10th generation Intel
Installed CPU:	Intel Core i5-10210U
Graphic Card:	Intel UHD Graphics
Memory Support:	DDR4
Installed Memory:	16GB RAM 32GB (optional)
Storage (HDD) Support:	SSD M.2 - NVMe SSD 2.5"
Installed Storage (HDD):	512GB SSD M.2 - NVME 1TB 2TB (optional)
IP Norm:	None
Temp:	-20°C ~ +55°C
Storage temperature:	-40°C ~ +70°C
Humidity:	10% - 90%
Others:	Color black
LAN:	2x Gigabit LAN 1000Mbps (Realtek RTL8111H)
Wireless LAN card:	WiFi 6E

3G:	No
4G LTE:	Optional
Bluetooth:	Bluetooth 4.2
Rear Panel (ports):	2× HDMI 2.0 DisplayPort 1.4a 2× LAN 2× RS232 2× USB 2.0 DC IN
Front Panel (ports):	USB-C 3.0 4× USB 3.0 2x RS232 3.5mm Microphone Jack 3.5mm Headphone Jack Power + LED
Expansion:	Adapter HDMI cable VESA mount WiFi Antenna
Power:	100-240V AC - 19V 3.42DC
Watch Dog Timer:	No
CD/DVD Drive:	None
TV Tuner:	No
Dimensions:	155 x 125 x 60 mm
Fanless:	Yes
Weight:	1,60kg

3 113,44 zł
net price: 2 531,25 zł

MobiPad nBOX MC8F-4C2L



SPECIFICATION

CONNECTIVITY AND COMMUNICATION

RESISTANCE AND DURABILITY

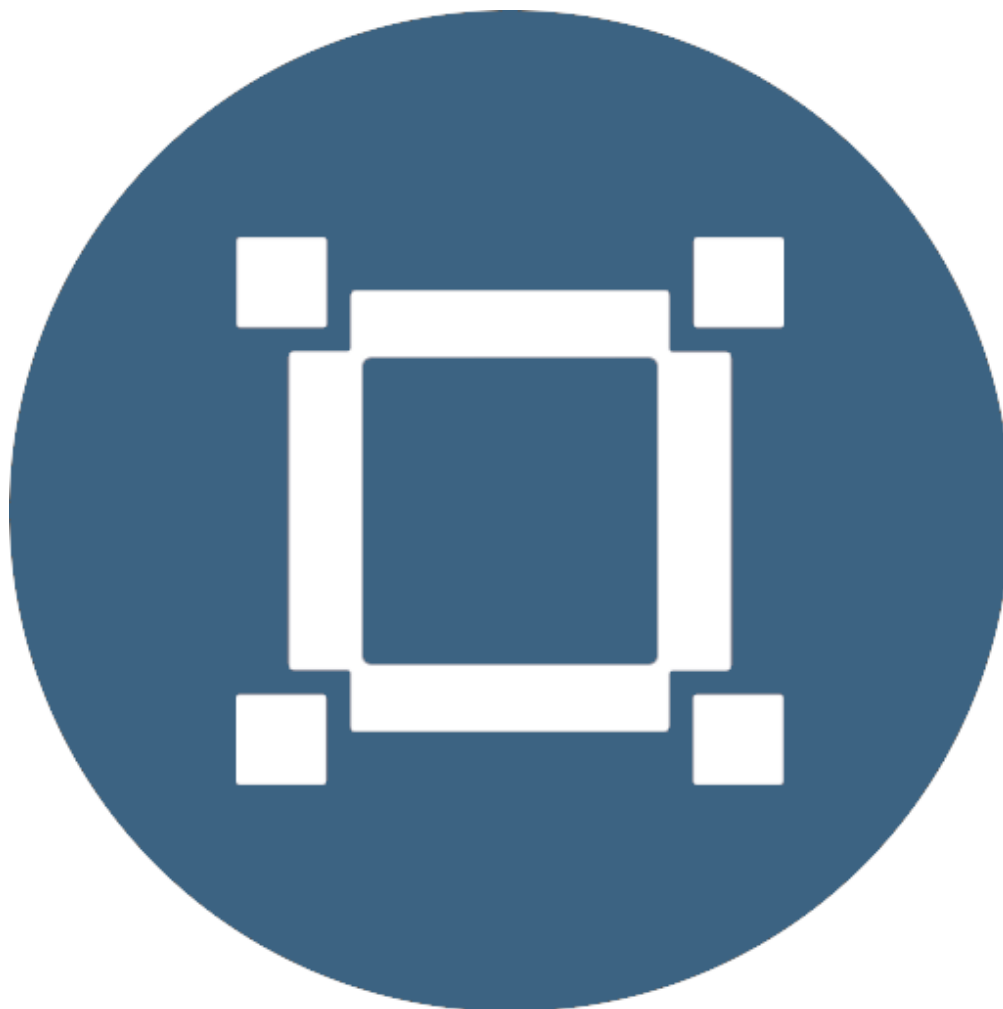
APPLICATION

AVAILABLE VERSIONS

Compact computer systems designed for industrial applications are distinguished by their excellent resistance to operation in harsh and dusty environments, ensuring completely silent operation at every workstation. The modern MobiPad nBOX MC8F-4C2L features a robust metal construction and passive cooling, ensuring stable operation without the use of vulnerable moving ventilation elements. This device is comprehensively equipped for continuous 24/7 operation, further enhanced by an integrated automatic start-up function after an unexpected power outage and full support for wake-up via the local

network. Thanks to the Intel UHD Graphics graphics chip, this device provides an exceptionally solid foundation for both advanced industrial installations and specialized operational centers requiring absolute operational continuity.

Small dimensions



The small size is ideal for any workstation, allowing for optimal use of available space.

Lightweight construction



The low net weight of just 1.6 kg combined with the very compact dimensions of the chassis ensures high mobility of the entire system and facilitates its everyday transport.

Efficient processor



The use of a powerful Intel Core i5-10210U processor translates into excellent smoothness and stability of the operating system when performing multiple complex operations simultaneously.

Wireless Networking



The integration of advanced connectivity technologies ensures exceptionally stable and lightning-fast data transmission using available wireless network protocols.

Quick Start



The use of modern storage media significantly reduces operating system loading times and ensures highly responsive and fast access to all running applications.

Passive Cooling



The cooling system's architecture, based on a completely devoid of mechanical moving parts, guarantees absolutely silent operation of the unit regardless of the specific conditions and load in the given working environment.

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SPECIFICATION

MobiPad nBOX MC8F-4C2L

Processor	Intel Core i5-10210U
Operating system	Supported: Windows 11, Windows 10, Linux

MobiPad nBOX MC8F-4C2L

RAM DDR4	16GB 32GB * (optional)
Hard Disk SSD M.2	512GB
Second Hard Disk SSD 2.5"	None 512GB * 1TB * 2TB * (optional)
Communication	WiFi 6E Bluetooth 4.2 4G LTE * (optional)
Connectors - front	1x USB-C 3.0 4x USB 3.0 2x RS232 3.5mm Headphone Jack 3.5mm Microphone Jack
Connectors - rear	2x HDMI 2.0 1x DisplayPort 1.4a 2x LAN 2x USB 2.0 2x RS232 1x DC IN
Dimensions	155 x 125 x 60 mm
Weight	1.6kg
Graphics card	Intel UHD Graphics
Colors available	Black (Metal Housing)

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



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

Efficient Processor

The reliable MobiPad nBOX MC8F-4C2L is powered by an advanced and highly

energy-efficient tenth-generation processor utilizing the Comet Lake architecture. This powerful processor variant offers four cores and eight threads clocked at up to 4.2 GHz while maintaining a very low power consumption of just 15W, ensuring the smooth execution of multiple demanding processes simultaneously. The innovative design of this system enables efficient management of system resources, which, combined with two integrated DDR4 memory slots supporting frequencies of 2666 and 3200 MHz, ensures maximum throughput for all processed data.

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Passive Cooling

The innovative architecture of the versatile MobiPad nBOX MC8F-4C2L device is based on a completely fanless heat dissipation system that maximizes the excellent thermal properties of the robust, all-metal housing. All thermal energy generated by the efficient quad-core processing unit is transferred directly to the outer shell of the structure, eliminating traditional fans and any mechanical components susceptible to damage. This passive technology not only ensures perfectly silent operation but also drastically minimizes the risk of hardware failures by creating a highly airtight barrier that prevents particles of dirt and dust from entering the system.

Dimensions

With its exceptionally compact housing, made entirely of solid metal and measuring just 155 millimeters in length, 125 millimeters in width, and 60 millimeters in height, the modern MobiPad nBOX MC8F-4C2L easily finds use in both traditional administrative spaces and highly demanding manufacturing plants.



Dimensions	155mm x 125mm x 60mm
Net weight	1600g

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Connectors and Buttons

The professional MobiPad nBOX MC8F-4C2L is equipped with a comprehensive set of connectors located directly on the front I/O panel, significantly simplifying the connection of multiple peripherals without having to access the rear of the machine. The front section of this robust design includes an easily accessible power button for quick system startup. The available interface offers four high-speed USB 3.0 ports and two reliable RS232 COM ports, enabling efficient transfer of large data packets and seamless interoperability with advanced measurement and logistics equipment. The same interface also integrates classic 3.5mm audio jacks, providing separate ports for headphones and a dedicated microphone, facilitating quick workstation setup for voice communication or acoustic signal analysis. This well-thought-out arrangement of elements on the front maximizes overall ergonomics and ensures exceptionally convenient management of all hardware connections, regardless of the specifics of the target deployment environment.



Power button

4x USB 3.0

USB-C 3.0

2x RS232

Line out/MIC IN



2x USB 2.0

2x LAN

2x RS232

DisplayPort

2x HDMI 2.0

DC IN

The rear input and output panel of the high-performance MobiPad nBOX MC8F-4C2L has been carefully designed with the highest reliability in mind, offering a classic DC IN power socket to ensure a stable supply of essential operating power. Lightning-fast and seamless network connectivity is ensured by two powerful Gigabit LAN ports, guaranteeing excellent data packet transfer with throughputs of up to 1000 megabits per second. High-quality video signal transmission to external monitors is achieved via two HDMI 2.0 ports and one DP 1.4 port, which support lag-free, highly detailed 4K video display at a smooth 60Hz refresh rate. The rear section also includes one state-of-the-art USB 3.0 Type-C port and two additional USB 2.0 ports, greatly simplifying workflows with multiple external peripherals without having to access the front interface. A huge advantage that extends the commercial and specialist use of this equipment in the industrial sector are two dedicated COM serial ports operating in the extremely popular RS232 standard, which ensure full compatibility with advanced machine controllers, logistics scanners and professional measuring equipment commonly used in complex modern automation systems.

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CONNECTIVITY AND COMMUNICATION

WiFi 6E wireless network

The advanced MobiPad nBOX MC8F-4C2L provides exceptionally stable and lightning-fast wireless connectivity thanks to its modern internal m.2 2230 PCIe

connector. This solution fully supports current Wi-Fi ac and ax market communication standards, encompassing the highly efficient version 6 and 6E network protocols. Implementing these advanced transmission technologies guarantees exceptionally smooth transfer of large data packets and minimizes potential transmission delays. High throughput makes this compact device ideal for handling intensive network traffic, ensuring continuous information exchange even in highly congested and busy work environments, such as computerized production halls or large office spaces.

Wired LAN

The industrial MobiPad nBOX MC8F-4C2L is equipped with two network ports based on proven Realtek RTL8111H controllers, guaranteeing stable throughput in the popular Gigabit LAN standard. This communication configuration enables highly efficient data packet exchange at speeds of up to 1000 megabits per second and effectively minimizes potential transmission delays in critical integrated infrastructure systems. The dual wired interface located on the rear panel of the enclosure provides excellent physical separation of the secure internal local network from the uncertain external environment, or allows for easy configuration of redundant emergency connections, dramatically increasing the reliability and uptime of the entire implemented ecosystem.

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RESISTANCE AND DURABILITY

Mechanical Damage

The use of an innovative passive heat dissipation system, combined with support for high-performance M.2 SATA or NVMe SSD storage media and the option to install an additional 2.5-inch drive with a SATAIII interface, makes the durable MobiPad nBOX MC8F-4C2L exceptionally resistant to vibration and mechanical damage. The complete absence of any moving components inside the sealed housing guarantees uninterrupted operational stability even in highly demanding industrial environments exposed to constant shock.



An undeniable advantage of the practical MobiPad nBOX MC8F-4C2L is its all-metal casing, which plays a key role in thermal regulation, acting as a highly efficient passive heat exchanger. This specialized external design is contoured to maximize the surface area for releasing accumulated thermal energy, allowing

for its rapid and completely natural dissipation into the environment.

Extreme Temperatures

The rugged MobiPad nBOX MC8F-4C2L is perfectly adapted to continuous operation in a highly unfavorable thermal environment, as clearly demonstrated by its supported operating temperature range, which ranges from -20 to +55 degrees Celsius.

Operating Temperature	-20°C to 55°C
Temperature Storage	-40°C to 70°C
Humidity	10% to 90%

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APPLICATIONS

Retail and Services

The ergonomic MobiPad nBOX MC8F-4C2L is an exceptionally effective solution for the retail and logistics industries, where its compact size significantly facilitates the use of advanced sales systems and the smooth processing of all documentation. The use of passive thermal dissipation combined with a highly robust housing made of durable metal guarantees completely silent operation in

direct customer contact points, significantly improving the standard of the workstation by completely eliminating annoying noise. The dedicated VESA mounting standard, with full support for the most popular 70x70 and 100x100 millimeter spacing, allows this miniature computer, weighing only approximately 1.6 kilograms, to be easily installed on the back of a monitor, under a desk, or directly in the cabin of a transport vehicle, thus maximizing the usability of very limited operating space. The implementation of such well-thought-out solutions makes this technologically advanced equipment ideal for use in very tight spaces, while providing full access to an extremely rich communication interface.



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Warehouse and Logistics

The stunning MobiPad nBOX MC8F-4C2L relies on a quad-core Intel Core i5-10210U from the Comet Lake-U family for its impressive operational performance, guaranteeing exceptionally smooth and optimized support for multiple, complex inventory management processes running in parallel. The incredibly durable metal casing, combined with a completely fanless cooling system, enables long-term and highly stable operation in harsh, dusty environments, while minimizing any risk of unwanted mechanical failure.



Transportation and Automotive

The uncompromising MobiPad nBOX MC8F-4C2L is exceptionally useful in the broadly defined transportation industry thanks to its standard DC IN power input, which significantly facilitates stable integration with power systems in various types of vehicles. This completely passively cooled industrial computer is ideal for use in delivery vans, trains, and modern public transportation, where it successfully ensures the smooth operation of advanced passenger information systems and continuous real-time diagnostics of key technical parameters.



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

AVAILABLE VERSIONS

The versatile MobiPad nBOX MC8F-4C2L features extensive hardware adaptability, allowing for extremely precise adjustment of this passive unit's parameters to specific project requirements. If specific technical features are required, a custom configuration can be developed, enabling the creation of a unique technological solution fully aligned with current operational needs.

	v.1	v.2	v.2.1	v.3	v.4	v.5
Windows 11 PRO	—	—	+	—	—	—
WiFi 6E	—	—	+	+	+	+
4G	—	—	—	—	—	—
8GB RAM	—	+	+	+	+	—
16GB RAM	—	—	—	—	—	+
32GB RAM	—	—	—	—	—	—
256GB SSD M.2 - NVMe	—	+	+	—	+	—
512GB SSD M.2 - NVMe	—	—	—	+	—	+
512GB SSD 2.5	—	—	—	—	+	—
1TB SSD 2.5	—	—	—	—	—	—
2TB SSD 2.5	—	—	—	—	—	—
	v.6	v.7	v.7.1	v.8	v.9	
Windows 11 PRO	—	—	+	—	+	
WiFi 6E	—	—	+	+	+	
4G	+	—	—	—	—	

8GB RAM	—	—	—	—	—
16GB RAM	+	+	+	—	—
32GB RAM	—	—	—	+	+
256GB SSD M.2 - NVMe	+	+	+	+	—
512GB SSD M.2 - NVMe	—	—	—	—	+
512GB SSD 2.5	—	—	—	—	—
1TB SSD 2.5	—	+	+	+	—
2TB SSD 2.5	—	—	—	—	+