



## Rugged Mini Industrial Computer Fanless MiniPC IBOX-NM31B Barebone

|                                 |                                 |
|---------------------------------|---------------------------------|
| <b>Category:</b>                | MiniPC Industry                 |
| <b>Manufacturer:</b>            | Mobilator                       |
| <b>Others:</b>                  | Color Black                     |
| <b>Chipset:</b>                 | Intel express chipset           |
| <b>CPU Support:</b>             | Intel Core i3 7100U (2x 2.4GHz) |
| <b>Installed CPU:</b>           | Intel Core i3 7100U (2x 2.4GHz) |
| <b>Memory Support:</b>          | DDR4 (max. 32GB)                |
| <b>Installed Memory:</b>        | -----                           |
| <b>Graphic Card:</b>            | Intel HD Graphics               |
| <b>Storage (HDD) Support:</b>   | SSD/HDD                         |
| <b>Installed Storage (HDD):</b> | None                            |
| <b>CD/DVD Drive:</b>            | -----                           |
| <b>LAN:</b>                     | 6*Intel 82583V 10/100/1000M     |
| <b>Wireless LAN card:</b>       | -----                           |
| <b>Bluetooth:</b>               | -----                           |

|                             |                                            |
|-----------------------------|--------------------------------------------|
| <b>3G:</b>                  | ----                                       |
| <b>TV Tuner:</b>            | ----                                       |
| <b>Watch Dog Timer:</b>     | ----                                       |
| <b>Front Panel (ports):</b> | 4x USB 3.0 / 1x HDMI / 1x COM RJ45 / Power |
| <b>Rear Panel (ports):</b>  | 6x LAN / Power connector                   |
| <b>Power:</b>               | 12V                                        |
| <b>Supported OS:</b>        | Microsoft Windows: 7/8/8.1/10, Linux       |
| <b>Installed OS:</b>        | ----                                       |
| <b>Dimensions:</b>          | 155mm x 126.5mm x 52.5mm                   |
| <b>Weight:</b>              | 1600g                                      |
| <b>Expansion:</b>           | ----                                       |
| <b>Fanless:</b>             | Yes                                        |
| <b>Humidity:</b>            | 0 ~ 95%                                    |
| <b>Temp:</b>                | -10°C — 60°C                               |
| <b>IP Norm:</b>             | ----                                       |
| <b>Storage temperature:</b> | -10°C — 60°C                               |

**Product from the Archive - production finished**



## TECHNICAL SPECIFICATION

## RESISTANCE AND DURABILITY

## CONNECTIVITY AND COMMUNICATION

## DEVICE APPLICATION

## AVAILABLE VERSIONS

Small dimensions industrial computers excel in environments where dust, dirt and moisture predominate. They are ideal for applications requiring quiet operation. Small and reliable MiniPC use heat-pipe technology and aluminum fins for passive cooling. The robust mini Industrial Computer IBOX-NM31B is a device designed for all industrial and non-continuous applications requiring continuous operation - 24 hours, 7 days a week.



### Small dimensions

The compact housing means that the Mini PC will fit wherever you need it and is easy to carry.



### Lightweight design

The computer's weight does not exceed 2.5kg, so it can be conveniently carried in a bag or backpack.



### Efficient components

The Intel Core two-core CPU provides improved device performance.



### Wireless network

The mini PC can be connected to nearby wireless networks by equipping it with an optional Wi-Fi module.

## SSD

### Quick start

A modern SSD drive will increase the speed of application programs and ensure quiet computer operation.



### Passive cooling

The use of passive cooling in the Mini PC ensures silent operation and slows dust deposition.

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# SPECIFICATION

## EFFICIENT PROCESSOR

The industrial mini-computer IBOX-NM31B uses an efficient and energy-saving Intel Core i3 7100U processor. Inside it there are two cooperating cores enabling more efficient processing of many tasks at the same time. The shared cache memory in which the multilevel hierarchy is used is dynamically allocated to each processor core depending on the load. This reduces the average access time to the main memory. Improved graphics card technology allows you to enjoy movies in full resolution and Full HD quality.



| Performance      |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| Processor        | Intel Core i3 7100U (2x 2.4GHz)                                                  |
| Graphics card    | Intel HD Graphics                                                                |
| Operating system | Windows 7/8/10   Linux                                                           |
| RAM              | 4GB <sup>*</sup> / 8GB <sup>*</sup> / 16GB <sup>*</sup> / 32GB <sup>*</sup> DDR4 |
| Drive            | 128GB <sup>*</sup> / 256GB <sup>*</sup> SSD   500GB <sup>*</sup> HDD             |
| Interfaces       |                                                                                  |
| Connectivity     | Wi-Fi <sup>*</sup>                                                               |
| Front panel      | 4x USB 3.0 / HDMI / COM / Power On/Off                                           |
| Rear panel       | 2x LAN / Power connector                                                         |
| SIM card         | None                                                                             |
| Memory card      | None                                                                             |
| Other            |                                                                                  |

|                  |                          |
|------------------|--------------------------|
| Available colors | Black                    |
| Dimensions       | 155mm x 126.5mm x 52.5mm |
| Weight           | 1.6kg                    |

\* Optional equipment, available only in other versions of the device.



Detailed device specification is available in the "[Technical data](#)" tab.

## PASSIVE COOLING

The industrial Mini PC uses a proven cooling system, based only on solid elements, mainly heat sinks. The system uses the phenomenon of metals passing thermal energy into the environment - there are no additional moving elements in the form of eg fans. This solution ensures noiseless operation, lower failure rate and greater protection against dust and other dirt while reducing the amount of energy consumed.



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# RESISTANCE

## TEMPERATURES

IBOX-NM31B is designed for continuous operation in both very low and high temperatures ranging from  $-10^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ . If the device is switched off, it can already handle temperatures in the range of  $-10^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ .





|               |              |
|---------------|--------------|
| Work temp.    | -10°C — 60°C |
| Storage temp. | -10°C — 60°C |
| Humidity      | 0% — 95%     |

## MECHANICAL IMAGE

The passive cooling system used in the MiniPC IBOX-NM31B combined with the non-disk SSD make this computer very resistant to various types of mechanical injuries. An additional advantage of industrial computers is a solid construction made of high quality aluminum and specially designed in such a way that in addition to high efficiency in heat dissipation, it can also resist any external damage.



# COMMUNICATION

## INTERFACES





## WIRELESS NETWORK

The dual-band Wi-Fi module provides quick access to the network wherever you can connect to secured or open Wi-Fi networks. This is a convenient solution for people who have a router at home or place of residence and a wireless network that can be used at no extra charge. Industrial mini-PC IB0X-NM31B has been equipped with the latest standard of this technology - 802.11n, which allows transfer of files at a dizzying speed of up to 150 Mb / s.



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# APPLICATIONS

## TRADE AND SERVICES

Mini PC is an ideal tool to support us in the implementation of many activities in the field of trade, small dimensions increase the possibility of its adaptation to activities such as issuing invoices or preparing documentation, which in turn allows us to convenient and optimal sales management. The VESA holder mounted to the housing provides many installation options, eg in stores (at the cash register, under the desktop, behind the LCD / LED monitor), in factory halls or in a delivery

truck.



## WAREHOUSE AND LOGISTICS

Thanks to COM ports and high performance, an industrial computer can be used to connect multiple devices in a warehouse and make their management much easier. Its rugged casing and the fanless cooling system are ideal for harsh environments in such rooms. The solid construction guarantees long-lasting work, even in environments with high dustiness and dirt.



## TRANSPORT AND MOTORIZATION

A small industrial computer can be used in transport thanks to the ability to work on 12V power supply. Then the mini computer can be used in passenger cars, buses, trams, taxis, trains and even in airplanes. It allows you to inform the driver about the current state of the vehicle, transfer its current location to the management center, display information for passengers, etc. It performs well in vehicles where small dimensions are important.



More pictures of the device available in the "[Gallery](#)" tab.

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# VERSIONS

The industrial mini-computer IBOX-NM31B is offered in several versions to suit different needs. By clicking on the number of the hardware configuration you will be redirected to the product with the parameters given in the table below. In addition, it is possible to create a configuration that is currently unavailable on the customer's request.

|           | v.0 | v.1 | v.2 | v.3 | v.4 |
|-----------|-----|-----|-----|-----|-----|
| WiFi      | —   |     |     |     |     |
| 4GB RAM   | —   |     | —   | —   | —   |
| 8GB RAM   | —   | —   |     |     | —   |
| 16GB RAM  | —   | —   | —   | —   |     |
| 128GB SSD | —   |     | —   | —   | —   |
| 256GB SSD | —   | —   |     | —   |     |
| 500GB HDD | —   | —   | —   |     | —   |