



## Robust Dust-proof industrial laptop Emdoor X14

|                          |  |
|--------------------------|--|
| <b>Category:</b>         | Laptops - Rugged                                       |
| <b>Manufacturer:</b>     | EMDOOR   |
| <b>Operating System:</b> | Windows 10 (without license)                           |
| <b>Display:</b>          | 14"   LED   Gorilla Glass 3   Scratch resistant        |
| <b>Brightness:</b>       | 700cd/m <sup>2</sup>                                   |
| <b>Touch screen:</b>     | -----  |
| <b>Processor:</b>        | Intel® Core™ i5-8250U (4x 1.6 GHZ)                     |
| <b>Graphics card:</b>    | Intel® HD Graphics 620                                 |
| <b>Memory:</b>           | 8GB DDR4L  |
| <b>Hard Drive:</b>       | 128GB SSD M.2  |
| <b>Durability:</b>       | IP65   1m. drops   MIL-STD 810G                        |
| <b>Security:</b>         | IP65   1m. drops   MIL-STD 810G                        |
| <b>Sand and dust:</b>    | IP6X   |
| <b>Waterproof:</b>       | IPX5   |
| <b>Drop:</b>             | up to 1m.  |
| <b>Shock:</b>            | MIL-STD 810G   |
| <b>Vibration:</b>        | MIL-STD 810G   |
| <b>Temperature:</b>      | Work temp.: -10°C do 50°C Storage temp.: -30°C do 70°C |

|  |   |
|--|---|
| <b>Humidity:</b>                         | 0 - 95%   |
| <b>1D barcode scanner (reader):</b>      | No  |
| <b>2D barcode scanner (reader):</b>      | No  |
| <b>RFID scanner (reader):</b>            | No  |
| <b>Other:</b>                            | -----   |
| <b>Battery:</b>                          | 2000mAh/7.4V (built in) / 6300mHA/7.4V (Pluggable)  |
| <b>Working time on battery:</b>          | 6 hours   |
| <b>Fast battery replacement ability:</b> | Yes   |
| <b>HotSwap battery:</b>                  | No  |
| <b>LAN:</b>                              | Yes   |
| <b>WLAN:</b>                             | 802.11 a/b/g/n/ac   |
| <b>WAN:</b>                              | <b>3G/2G:</b> GSM/GPRS/EDGE Band (850&900&1800&1900 MHZ)WCDMA Band(850&900&1900&2100MHz)HSDPA 21MbpsHSUPA 5.76 Mbps <b>4G:</b> LTE: B1/B2/B3/B4/B5/B7 |
| <b>WAN:</b>                              | <b>3G/2G:</b> GSM/GPRS/EDGE Band (850&900&1800&1900 MHZ)WCDMA Band(850&900&1900&2100MHz)HSDPA 21MbpsHSUPA 5.76 Mbps <b>4G:</b> LTE: B1/B2/B3/B4/B5/B7 |
| <b>Bluetooth:</b>                        | Bluetooth 4.2 (BLE)   |
| <b>GPS:</b>                              | u-Blox NEO-7 (GLONASS+QZSS+GPS)   |
| <b>In/Out:</b>                           | 1x RS2321x RJ453x USB 3.0DC1x USB 2.01x SD Card1x SIM1x HDMI Type A1x Audio Jack  |
| <b>Flash Card Reader:</b>                | Micro SD  |
| <b>Audio:</b>                            | Speakers 0.8W/8Ω   Audio Jack   |
| <b>CD/DVD:</b>                           | No  |
| <b>COM port:</b>                         | 1x DB9 (1x RS232)   |
| <b>Camera:</b>                           | Front: 2Mpx   |
| <b>Magnetic card reader (MSR):</b>       | No  |
| <b>Microchip card reader:</b>            | No  |
| <b>Keyboard:</b>                         | Yes - connected to device   |
| <b>Additional Navigation Devices :</b>   | No  |

|  |                            |
|--|----------------------------|
| <b>Optional accessories:</b>                       | -----                      |
| <b>Docking station connector:</b>                  | No                         |
| <b>VESA standard – holders and mounts support:</b> | No                         |
| <b>BIOS:</b>                                       | -----                      |
| <b>Chipset:</b>                                    | -----                      |
| <b>Swivel Hinge:</b>                               | -----                      |
| <b>Contrast:</b>                                   | -----                      |
| <b>VGA out:</b>                                    | No                         |
| <b>TV Out:</b>                                     | No                         |
| <b>TV Tuner:</b>                                   | No                         |
| <b>Casing material:</b>                            | -----                      |
| <b>Color:</b>                                      | Black                      |
| <b>Size:</b>                                       | 305 x 205 x 16.5mm - 2850g |
| <b>Fanless casing:</b>                             | Yes                        |

**6 923,36 zł**

net price: 5 628,75 zł



## TECHNICAL SPECIFICATION

## RESISTANCE AND DURABILITY

## CONNECTIVITY AND COMMUNICATION

## DEVICE APPLICATION

## AVAILABLE VERSIONS

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

a week



### Reinforced housing

The reinforced Emdoor notebook case is resistant to mechanical damage and external factors such as temperature difference.



### Lightweight design

The notebook weight does not exceed 3.0 kg, so it can be conveniently carried in a bag or backpack.



### Efficient components

The Intel Core i5 8250U quad - core CPU provides improved device performance.



### Wireless network

The notebook can be connected to nearby wireless networks by equipping it with an installed Wi-Fi module.



### Quick start



## Passive cooling

A modern SSD M.2 drive will increase the speed of application programs and ensure quiet computer operation.

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

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# SPECIFICATION

## Performance

|                  |  |
|------------------|--|
| Processor        | Intel Core i5 8250U (4x 1.60GHz)   |
| Graphics card    | Intel UHD Graphics 620   |
| Operating system | Windows 10 (Home <sup>*</sup> / Professional <sup>*</sup> / IoT <sup>*</sup> ) |
| RAM              | 8 GB DDR4L   |
| Drive            | 128 GB SSD M.2 / 256 SSD M.2 <sup>*</sup> / 1TB SSD M.2 <sup>*</sup>           |

## Interfaces

|              |  |
|--------------|--|
| Connectivity | Wi-Fi Intel 3165 (a/b/g/n/ac)<br>2x LAN - Intel I219 + I210 10/100/1000 Mbps |
|--------------|--|

## Interfaces

|            |  |
|------------|--|
| Connectors | 1x RS232<br>2x RJ45<br>3x USB 3.0<br>DC<br>1x USB 2.0<br>1x SD Card<br>1x SIM<br>1x HDMI Type A<br>1x Audio Jack |
|------------|--|

## Other

|                  |                        |
|------------------|------------------------|
| Available colors | Black                  |
| Dimensions       | 305mm x 205mm x 16,5mm |
| Weight           | 2.850 kg               |

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



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

## Comparison of disk speeds

|               |                                 |
|---------------|---------------------------------|
| HDD           | Read: 170MB/s   Write: 140MB/s  |
| SSD M.2 Drive | Read: 520 MB/s   Write: 370MB/s |

## EFFICIENT PROCESSOR

The industrial notebook Emdoor X14 uses an efficient and energy-saving Intel Intel Core i5 8250U processor. Inside it there are four 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.





## DIMENSIONS



## PASSIVE COOLING

The industrial Emdoor Notebook 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 e.g. 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

X14 by Emdoor is designed for continuous operation in both very low and high temperatures ranging from  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . If the device is switched off, it can

already handle temperatures in the range of -30 ° C to 70 ° C.



|                      |              |
|----------------------|--------------|
| <b>Work temp.</b>    | -10°C — 50°C |
| <b>Storage temp.</b> | -30°C — 70°C |
| <b>Humidity</b>      | 10% — 95%    |

## MECHANICAL DAMAGE

The passive cooling system used in the notebook combined with the non-disk SSD M.2 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.

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## 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 notebook X14 has been equipped the standard of - 802.11(a/b/g/n/ac), which allows transfer of files at a dizzying speed of up to 433 Mb / s.

## WIRED LAN NETWORK

The notebook Emdoor X14 has built-in the Intel network adapter that can work in a fast Gigabit Ethernet network.

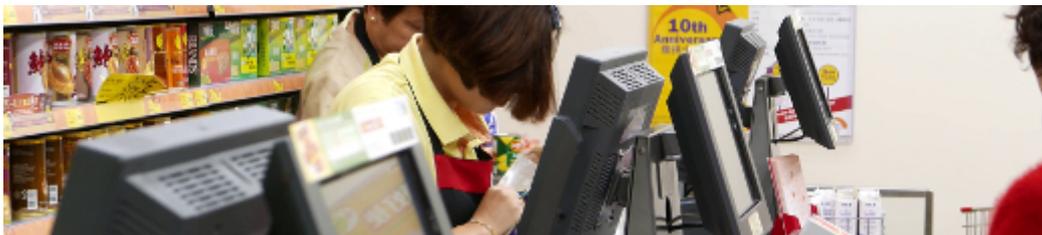


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# APPLICATIONS

## TRADE AND SERVICES

Industrial notebook 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.



## WAREHOUSE AND LOGISTICS

Thanks high performance an industrial notebook 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.



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

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The industrial Emdoor X14 notebook 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.1 | v.2 | v.3 | v.4 | v.5 | v.6 | v.7 | v.8 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 128 GB SSD | +   | -   | -   | -   | -   | -   | -   | -   |

|                 |            |             |             |             |             |             |             |             |
|-----------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 256 GB SSD      | -          | +           | -           | -           | -           | -           | -           | +           |
| 1 TB SSD        | -          | -           | +           | -           | -           | -           | -           | -           |
| Windows 10 Home | -          | -           | -           | +           | -           | -           | -           | -           |
| Windows 10 Pro  | -          | -           | -           | -           | +           | -           | -           | -           |
| Windows 10 IoT  | -          | -           | -           | -           | -           | +           | -           | -           |
| 4G              | -          | -           | -           | -           | -           | -           | +           | +           |
| Screen Dotykowy | -          | -           | -           | -           | -           | -           | -           | -           |
|                 | <b>v.9</b> | <b>v.10</b> | <b>v.11</b> | <b>v.12</b> | <b>v.13</b> | <b>v.14</b> | <b>v.15</b> | <b>v.16</b> |
| 128 GB SSD      | -          | -           | -           | -           | -           | -           | -           | -           |
| 256 GB SSD      | +          | -           | +           | -           | +           | -           | +           | -           |
| 1 TB SSD        | -          | +           | -           | +           | -           | +           | -           | +           |
| Windows 10 Home | -          | -           | -           | -           | -           | -           | -           | -           |
| Windows 10 Pro  | +          | +           | +           | +           | +           | +           | -           | -           |
| Windows 10 IoT  | -          | -           | -           | -           | -           | -           | -           | -           |
| 4G              | +          | +           | -           | -           | +           | +           | +           | +           |
| Screen Dotykowy | -          | -           | -           | -           | +           | +           | +           | +           |