

Fanless Box Computer with Intel® Core™ i3/i5/i7 Processor, 2x LAN, 6x COM

## Overview

The NBC-2412 fanless industrial computer boasts a cableless design, delivering superior resistance to vibrations and electromagnetic interference. Its innovative modular architecture, which integrates a CPU board with a plug-in I/O board, significantly streamlines product upgrades, reducing both time and costs. This design also enables effortless customization to align with diverse customer application requirements. Additionally, the NBC-2412 provides extensive I/O interfaces and expansion options, including COM ports, GbE LAN, GPIO, WiFi, and 4G connectivity, ensuring versatile and reliable performance in demanding industrial environments.

## Features

- Intel® Core™ i3/i5/i7 processor
- 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI
- 2x CAN2.0 (optional), 16x Opto-isolated DIO(optional)
- 9 to 36VDC power input



Operating Temp.



Power Input



Fanless

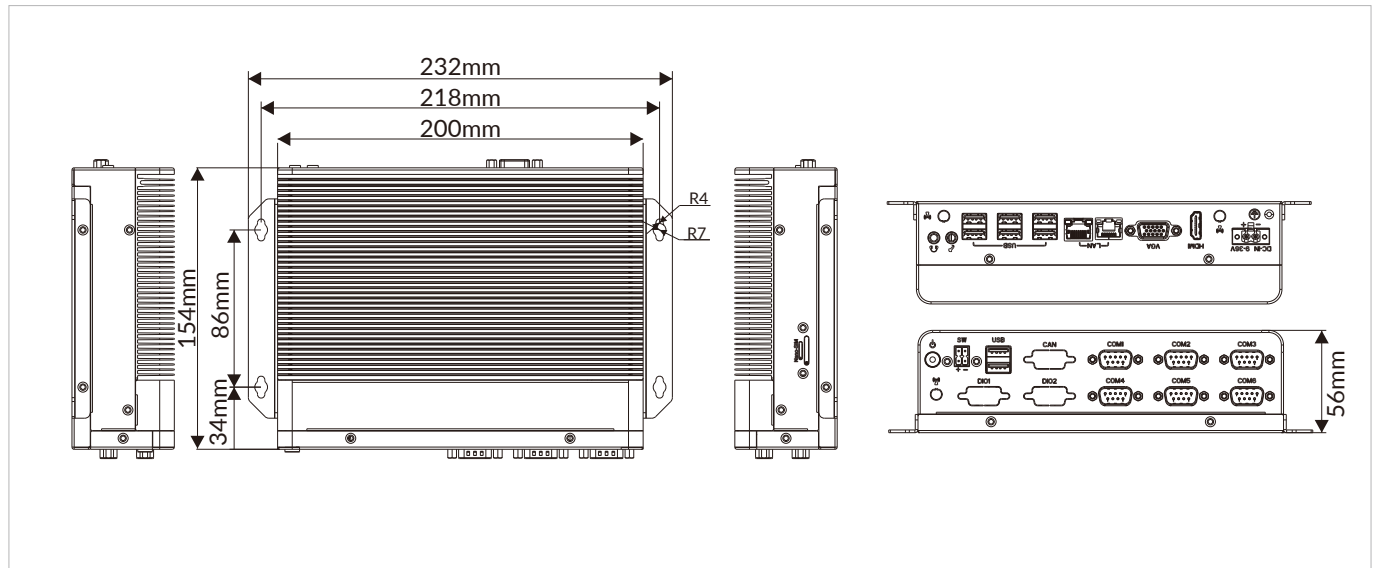
## I/O Interfaces



## Specifications

<b>System</b>				
CPU	Intel® Core™ i3-8145U /i5-8265U	Intel® Core™ i3-10110U /i5-10210U/i7-10510U	Intel® Core™ i3-1115G4/ i5-1145G7/i7-1185G7	Intel® Core™ i3-1215U/ i5-1235U/i7-1255U
CPU TDP	15W			
Memory	1x DDR4 2666 MHz SO-DIMM up to 32GB		1x DDR4 3200 MHz SO-DIMM up to 32GB	
Storage	1x mSATA		1x M.2 2280 Sata	
BIOS	AMI UEFI			
Watchdog Timer	Software Programmable supports 256 levels system reset			
<b>I/O Ports</b>				
USB	6x USB 2.0, 2x USB 3.0			
Serial	6x COM (1x RS-232/422/485, 5x RS232)		6x COM (1x RS-232/485,1x RS-232/422/485,4x RS232)	
Ethernet	2x 10/100/1000/2.5G BASE-T(TX)(Supports wake On LAN)			
Display	1x VGA, 1x HDMI			
SIM Card Slot	1x SIM card slot(optional)			
DIO	16x Opto-isolated DIO(optional)			
CAN bus	2x CAN 2.0B(optional)			
Antenna	3x SMA antenna holes			
<b>Expansion Slot</b>				
Mini PCIe	1x Full length mini PCIe		N/A	
M.2	N/A		1x M.2 2230 E-Key/1x M.2 2280 Sata	
<b>RF Communication</b>				
Wi-Fi	Mini PCIe		M.2 2230 E-Key	
Cellular	Mini PCIe			
Bluetooth	Mini PCIe		M.2 2230 E-Key	
GNSS	Mini PCIe			
<b>Audio</b>				
Audio	Mic in, line out			
<b>Power</b>				
Button	Yes			
Remote Power On/Off	4-Pin Remote SW&Power LED			
DC Input	9-36VDC			
Power Mode	AT/ATX			
<b>Operating System</b>				
Windows	Windows 10/11			
Linux	Ubuntu			
<b>Mechanical</b>				
Dimensions (W x D x H)	200 x 154 x 56 mm (7.87 x 6.06 x 2.21 inches)			
Weight (N.W.)	2 kg (4.41 lbs)			
Mounting	Wall mount			
Material	Aluminum alloy			
<b>Environment</b>				
Operating Temperature	-10 to 60°C (14 to 140°F)			
Storage Temperature	-20 to 60°C (-4 to 140°F)			
Relative Humidity	10% to 95% @ 40°C (104°F), non-condensing			
<b>Certification</b>				
EMC	CE, FCC Class A			

## Dimensions



## Optional Accessories

Part No.	Description
A.02.001.000058	110-240VAC Input, 12VDC/5A Output, 60W, Phoenix 2P Terminal Block Connector(5.0)
C.02.009.000094	110-240VAC Input, 12VDC/7A Output, 84W, Phoenix 2P Terminal Block Connector(5.0)

## Ordering Information

Part No.	Description
NBC-2412-8145U	Core™ i3-8145U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-8265U	Core™ i5-8265U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-10110U	Core™ i3-10110U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-10210U	Core™ i5-10210U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-10510U	Core™ i7-10510U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-1115G4	Core™ i3-1115G4 NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-1145G7	Core™ i5-1145G7 NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-1185G7	Core™ i7-1185G7 NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-1215U	Core™ i3-1215U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-1235U	Core™ i5-1235U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC
NBC-2412-1255U	Core™ i7-1255U NBC with 6x COM, 2x LAN, 8x USB, 1x VGA, 1x HDMI, 9 to 36VDC