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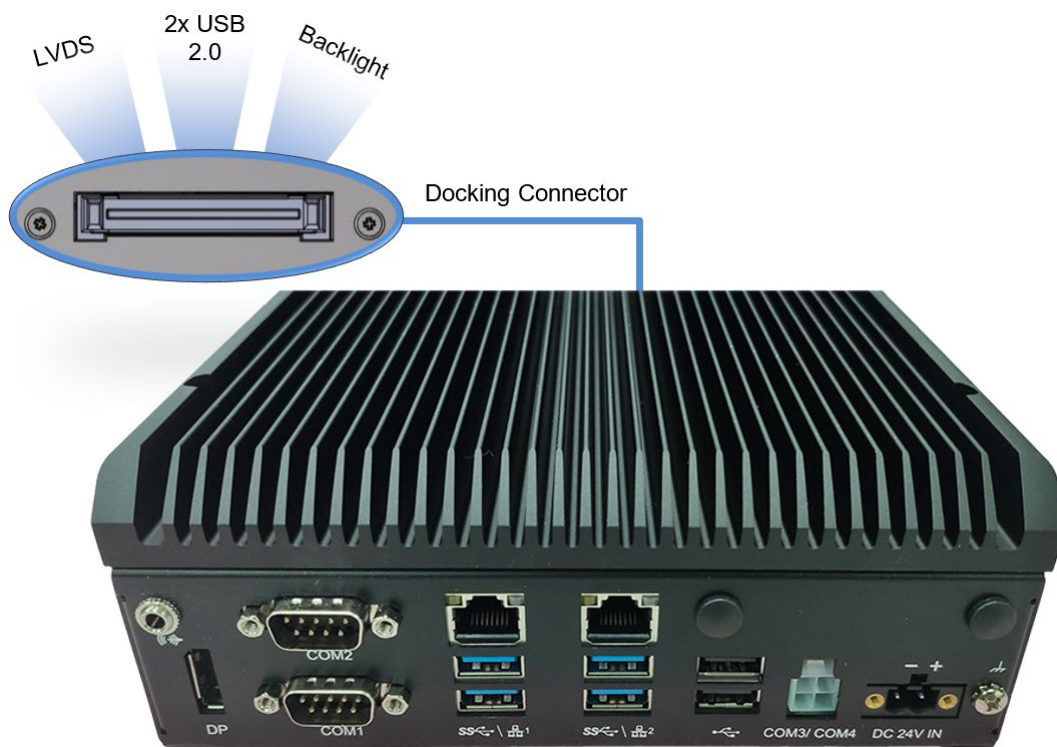
# Datasheet

## Distec

### BoxPC Pro NPA-1904

Fanless & Compact Embedded BOX PC with i5-7300U or i3-7100U and unique Docking Connector  
for easy control of external LVDS TFT Displays and e.g. USB Touch Controller / Webcam

PC-60-994 (i5-7300U) or PC-61-040 (i3-7100U)



Version 1.3

09.09.2021

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## 1 Revision History

Date	Rev.No.	Description	Page
24.11.2020	1.0	First Revision	All
05.02.2021	1.1	Changes Accessories and RS485, Changed Pictures	2, 5, 7
20.08.2021	1.2	Added DIN Rail Mounting Kit; new document template	5, 8
09.09.2021	1.3	SSD changed	5

## 2 Description

The Embedded Box PC was developed especially for industrial and cost-effective applications and is designed for 24/7 usage. Inside the Box PC you will find a 7<sup>th</sup> Generation Intel® Core™ i5-7300U or i3-7300U Processor. Despite its Core™ i performance, the PC can be operated fanless. It has a large number of I/O interfaces such as 2x RS485 and 2x RS232, DisplayPort and 2x Gigabit Ethernet. The specially developed docking connector is particularly noteworthy, allowing for an LVDS display with e.g., touch and/or webcam to be operated externally.

## 3 Features

- 7th Gen. Intel® Core™ i5-7300U or i3-7100U Embedded processor
- Unique docking connector (LVDS, BL & USB 2.0)
- DisplayPort
- 2x Intel® Gigabit Ethernet
- Compact and fanless design
- 2x RS485
- 2x RS232
- 24V DC-in

## 4 Specification

<b>Processor</b>	CPU	7th Gen. Intel® Core™ <b>i5-7300U</b> or <b>i3-7100U</b>
	Frequency	2.6 GHz (7300U), up to 3.5 GHz 2.4 GHz (7100U)
	Cores / Threads	2 / 4
	Embedded Version	Yes
<b>Memory</b>	Capacity	8GB (2x 4GB) built-in
	Max. capacity	32GB
	Technology	DDR4-2133
	Socket	2x SO-DIMM
<b>Graphics</b>	Processor Graphics	Intel® HD 620
	LVDS	24-bit Dual Channel LVDS via Docking Connector
	DisplayPort++	Max. 4096x2304@ 60Hz
<b>Ethernet</b>	LAN 1	Intel® 10/100/1000 I211AT
	LAN 2	Intel® 10/100/1000 WGI219LM
<b>Front I/O</b>	USB	4x USB 3.0 (Type A) 2x USB 2.0 (Type A, via HUB)
	Serial Port	2x RS485 (2x2 P4.2mm MALE 90D) 2x RS232 (DB-9 male connector)
	DisplayPort	1x
	Audio	1x Audio out
	Power Supply	<b>24V DC-in</b>
	<b>Rear I/O</b>	USB
Docking Connector		2x USB 2.0 1x 24-bit Dual Channel LVDS / Backlight
<b>Storage/Extension</b>	M.2	industrial 60GB, SATA, M.2 2280, 3D TLC built-in
<b>Other</b>	TPM	2.0
	Power on/off	Switch for on/off
	LED	for Power and SSD
	Watchdog Timer	Yes
<b>General</b>	Operating Temperature	0...+45°C
	Storage Temperature	-20...+70°C
	Operating humidity	10...90% (non-condensing)
	Storage humidity	5...95% (non-condensing)
	Dimensions	175 x 224,5 x 65 mm
	Housing	tbd.
	Power consumption	tbd.
	Weight	tbd.
Certifications	CE, FCC, EU-RoHS	

## Ordering Information

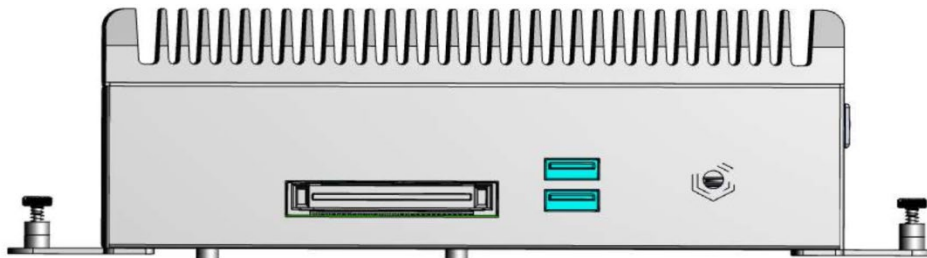
Order Nr.	Description
<b>PC-60-994</b>	BoxPC Pro NPA-1904-7300 with i5-7300U, 8GB Memory, 60GB SSD
<b>PC-61-040</b>	BoxPC Pro NPA-1904-7100 with i3-7100U, 8GB Memory, 60GB SSD
<b>ZU-02-502</b>	IF433 Docking Board with LVDS/BL Connector and 2x USB 2.0 I/O Panel Voltage: +5V_LCD, LVDS_OPT_0: GND, LVDS_OPT_1: N.A., LVDS_OPT_2: N.A LVDS_OPT_3: N.A, SBR_CTRL: Limited dimming range 10% to 100%
<b>KI-90-033</b>	DIN Rail Mounting Kit

## 5 Connectors / Interfaces

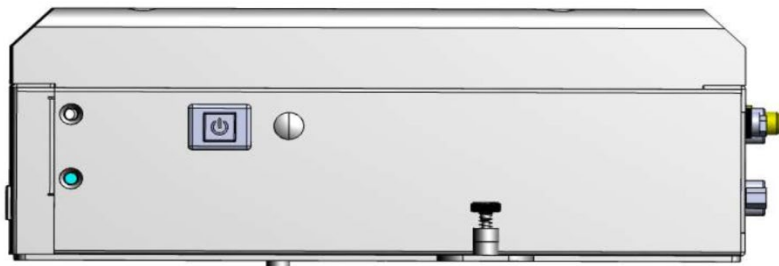
Front I/O



Rear I/O



Side view

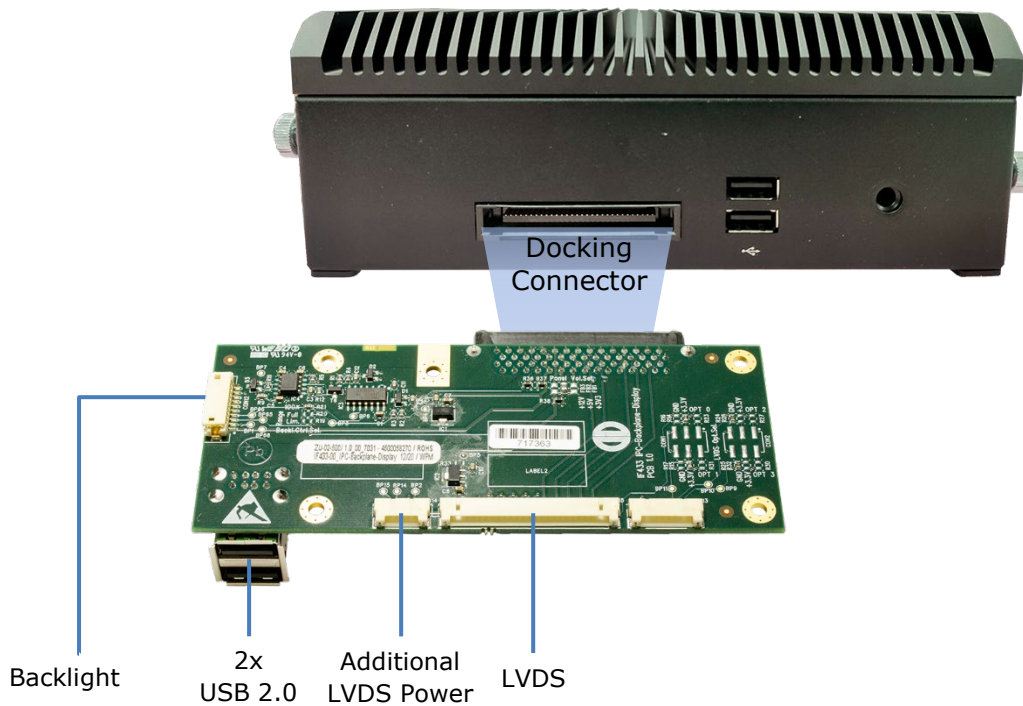


## 6 Operating System – Windows 10 IoT Enterprise

The Box PC comes optional with pre-installed “ready-to-use” Windows 10 IoT Enterprise 2019 LTSC Standard Image for worldwide use.

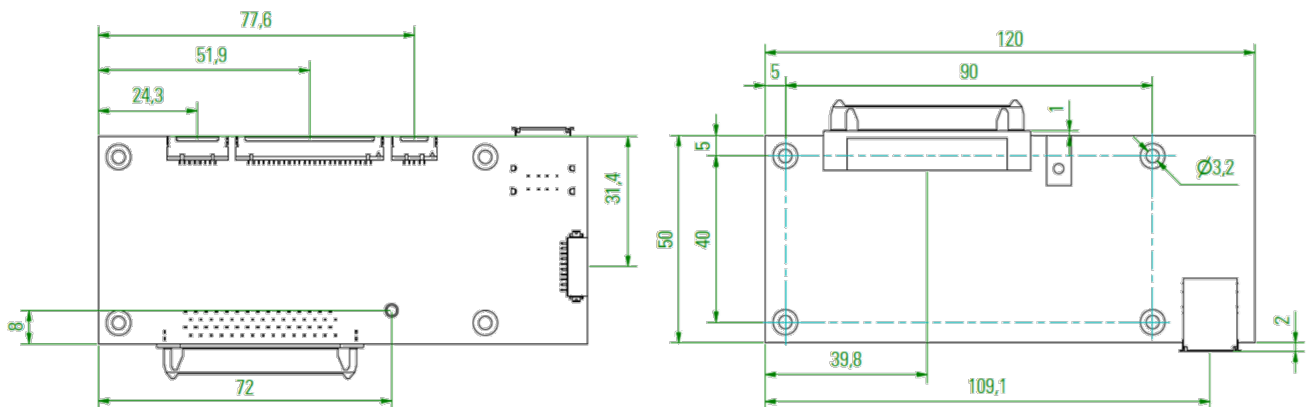
## 7 Docking Board

With the docking connector board, the internally used LVDS signal and further USB 2.0 can be easily led outside. With this unique standard feature, it is very easy to extend or add the Box PC to an LVDS TFT display and e.g. webcam / PCAP touch etc.

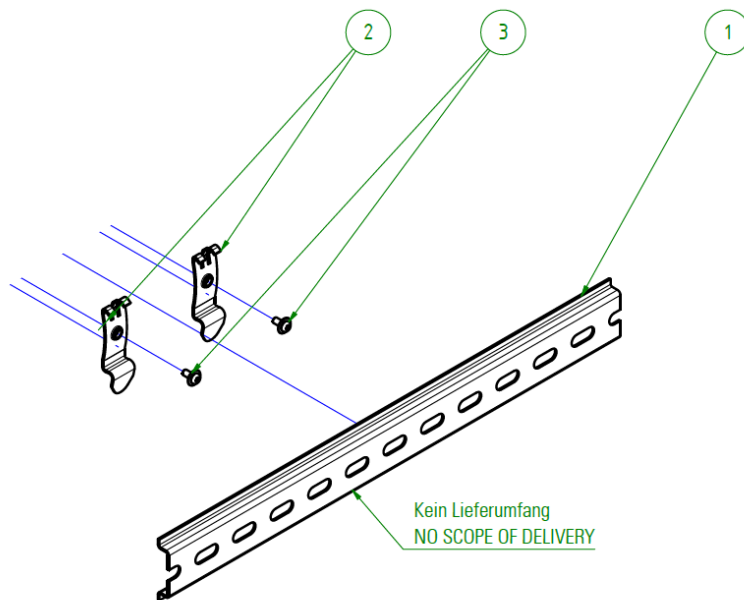


An easy exchange of the Prisma card by the docking board is possible one to one. The cables with the connectors are 100% compatible.

### 7.1 Docking Board Drawing



## 8 DIN Rail Mounting Kit (KI-90-033)





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