

APPLICATIONS

The **EM BoxPC-NUCO** is the perfect communication gateway for industrial IoT applications. Especially designed for low-power, noiseless and extreme temperature environments. No fans or other rotating devices are used. It is a german engineered and produced high quality BoxPC system, offering high performance in tough environments.

- _ Rugged Industrial Systems
 - no rotating parts, low-power
- _ Gateways
- _ Medical Solutions
 - ARM® performance
- _ Telecommunication
 - industrial-grade outdoor routers
- _ Automation Control
 - scalable, long term availability,
 - flexible expansion
- _ Information Systems
- _ Measurement
 - USB-Client-Port

EM TRUST
systems you can trust

eNUC

BOXPC-NUCO



BoxPC system with high computer performance and small dimensions.



With a large number of interfaces in a small package, a wide range of applications are supported.



The BoxPC is designed for industrial-grade communication applications in extreme temperature environments.



A customized frontpanel design is optional available.



Expand your system with various USB options.



Optimized system for harsh and tough environments.

HIGH QUALITY
MADE IN GERMANY

15 years
long life
support¹

+ -
60V

E.E.P.D.
...just embedded!

SPECIFICATIONS

CPU	NXP i.MX6 processors ¹
Max. memory	Up to 1 GB DDR3 soldered memory onboard
Gigabit Ethernet	Up to 2 (MICREL KSZ9031RNX ² , Intel® I210 with IEEE1588)
First LTE/4G (OPTIONAL)	300 Mbps max./EMEA, APAC/Diversity/GNSS
Second LTE/4G (OPTIONAL)	300 Mbps max./EMEA, APAC/Diversity/GNSS
WiFi/BT (OPTIONAL BPCNOB only not in combination with second LTE)	802.11 AC with diversity/Bluetooth Version 5
NAND flash	2 Gbit
SD-Card	1 MicroSD-Card (up to SDR104 speed grade; 104 MB/s max.)
USB ports	2 USB 2.0
USB OTG	OEM/ODM option
Serial ports (OPTIONAL)	2 RS-232 2 RS-485
Other	RTC Watchdog Temperature sensor
Power supply	Min. 8 V / Max. 60 V (DC)
Fanless	Designed for fanless operation
Max. operating temp.	-40 °C to +85 °C ambient industrial grade
Max. storage temp.	-40 °C to +105 °C
Max. rel. humidity	95 % @ 40 °C, non-condensing
Housing	Sturdy metal case
Mounting	Stand alone or hat rail
Dimensions approx.	117 x 120 x 45 mm
Weight approx.	550 grams + options
Conformity	CE, ROHS, REACH
OS support	Linux (Yocto Project w/ FSL Community BSP 2.3)

¹ 15 years availability according to CPU manufacturers specification

² 1st GbE port currently limited to 480 MBit/s

FLEXIBLE COMMUNICATION BY A LARGE NUMBER OF WIRELESS INTERFACES



OVERVIEW

The BoxPC-NUCO is the perfect industrial grade communicator for secure and reliable IoT communication. It is designed as a flexible low-power system with an excellent performance-per-watt ratio.

SUMMARY

- ▶ Extended temperature
- ▶ Flexible communication
- ▶ OEM/ODM with customer branding in small quantities available
- ▶ Easy mounting
- ▶ High performance
- ▶ Small dimensions

Ordering Code System	Description	Type
BPCNOA	eNUC System passive cooled	i.MX6 Solo / 800 MHz 256 MB memory down / 1 GbE 1 PCI Express® Mini Card USB only
BPCNOB	eNUC System passive cooled	i.MX6 Quad / 800 MHz 1 GB memory down / 2 GbE

OPTION	Description
LT1	First LTE/4G Modem
LT2	Second LTE/4G Modem
WBT	WiFi/BT card BPCNOB only Not in combination with LT2
CM1	COM 1 RS-232 Port
CM2	COM 2 RS-485 Port HDX
CM3	COM 3 RS-485 Port HDX
CM4	COM 4 RS-232 Port
LNK	Linux Yocto Project



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**E.E.P.D. Electronic Equipment
Produktion & Distribution GmbH**

Gewerbering 3
85258 Weichs - Germany
Phone +49 8136 2282-0
Fax +49 8136 2282-109
Internet: www.eepd.de
E-Mail: sales@eepd.de