

SPECTRA POWERBOX 100-IoT

FEATURES

- Edge PC as a gateway for the Industrial Internet of Things (IIoT)
- Transporting data from process-level to a private or public cloud
- Small, fanless Edge-PC with an attractive industrial-PC design
- 64-bit Linux Operating System an user-friendly graphical UI.
- Node Red Softwaretool for a fast, visual development of IIoT-applications

Spectra Powerbox 100-IoT is a cost-effective, compact industrial Edge-PC.

The system is equipped with an operating system specially tailored for the needs of IIoT-applications and with the visual IIoT development tool Node Red.

THE EDGE PC AS AN IIOT GATEWAY

Used as an IIoT Gateway the Edge PC offers a high CPU performance and many data-storing options like SSD, HDD or USB.

For data pre-processing, data consolidating or data compression, self-written software or standard-packages for automation can easily be implemented and processed locally on the system. This is the advantage of the universal Edge PC over smaller, more specialized IIoT-controllers.

COMMUNICATIVE AND EXPANDABLE

With the many interfaces, like 4 x USB, 2 x COM and 2 x LAN a variety of communication channels can be used. Additionally, two Mini-PCIe sockets provide options for WiFi-, GSM- or Fieldbus modules.



SPECTRA POWERBOX 100-IoT

SYSTEM

Processor	Intel® Celeron® J1900 Quad Core 2,0 GHz
Chipset	SOC (System on Chip)
BIOS	AMI 64 Mbit SPI
Memory	1 x 2 GB DDR3L, PC1600
Network	2 x Intel® i210 Gigabit-LAN with WoL
Audio	Realtek ALC888S Codec
Watchdog	software programmable, 1~255 sec.

I/O INTERFACES

Front	<ul style="list-style-type: none"> - 1 x USB3.0 - 3 x USB2.0 - 2 x RJ45 - AT/ATX-Switch - 1 x line-out, 1 x mic-in - Power - Remote power on/off & reset
Rear	<ul style="list-style-type: none"> - 2 x COM - 1 x DVI-I - 2 x holes for antennas

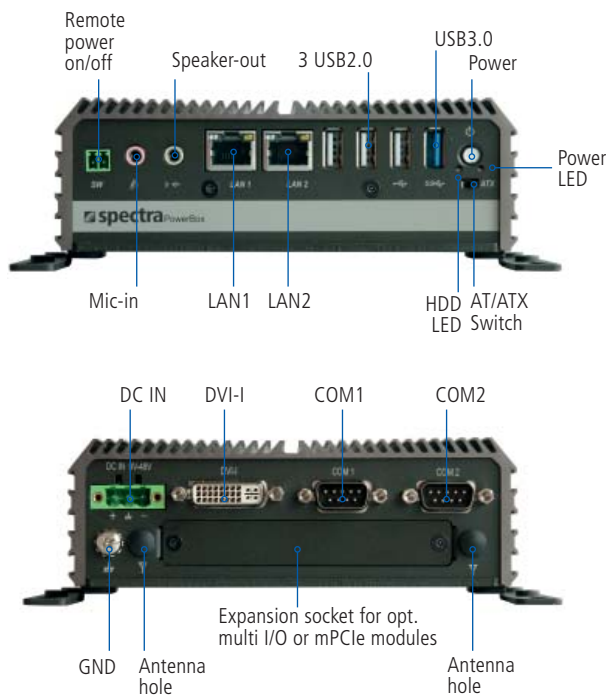
EXPANSIONS & DRIVES

Expansion slots	<ul style="list-style-type: none"> - 1 x mPCIe (Full Size), for WiFi / GSM or expansion cards - 1 x SIM card slot - 1 x Multi I/O socket
HDD / SSD	32 GB mSATA-6G SSD

MECHANICAL & ENVIRONMENT CONDITIONS

Chassis	Aluminum special profile
Dimensions (WxHxD)	150 x 52,27 x 105 mm
Weight	0,86 kg
Mounting	Wall, optional: side board, VESA, DIN-rail
Temperatures	Operating temperature: 0 °C to +45°C Storage temperature: -40°C to +80°C Relative humidity: 10% to 95%, non-condensing
Power	AT, ATX 9 – 48 V DC 60 W Power adapter, 12 V / 5 A, 3-pin, C14
Operating system	Embedded Linux
Warranty	24 months
Certifications	CE, FCC Class A

INTERFACES



ORDERING INFORMATION

N° 151874 Spectra PowerBox 100-IoT-J19

Mini-PC, Intel® Celeron® J1900 QC, 2 GB RAM, 32 GB SSD, 64-bit Linux

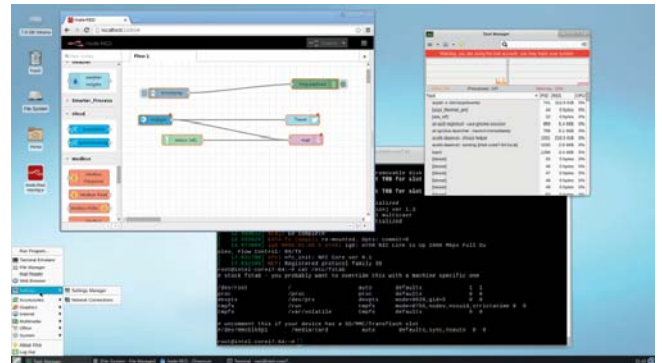
PACKING LIST

- 1 x power adapter,
- 1 x power terminal block connector (female)
- 1 x driver CD
- 1 x DVI-I to VGA adapter
- 1 x DVI-I (M) to DVI-D (F) + VGA (F) cable, length: 200 mm
- 2 x rail kit for wall mount
- 1 x pack of screws

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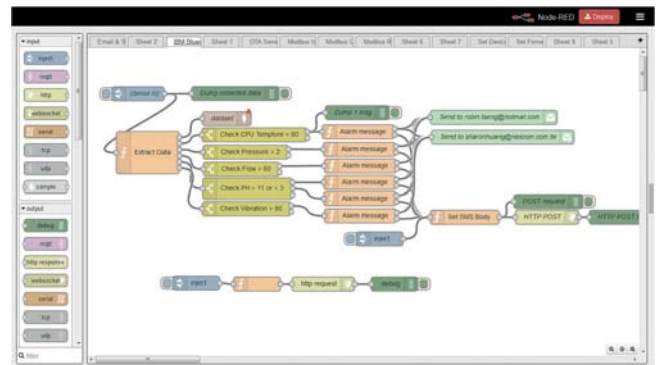
OPERATING SYSTEM / USER INTERFACE

64-bit Linux, based on Kernel 4.4.3, is a stable, efficient and resource-saving operating system. The user interface (UI), tailored to the needs of IIoT-application developers or –administrators provide comfortable, graphical screens for maintaining the most important managing functions. The Yocto environment ensures a quality-managed development over the life cycle.



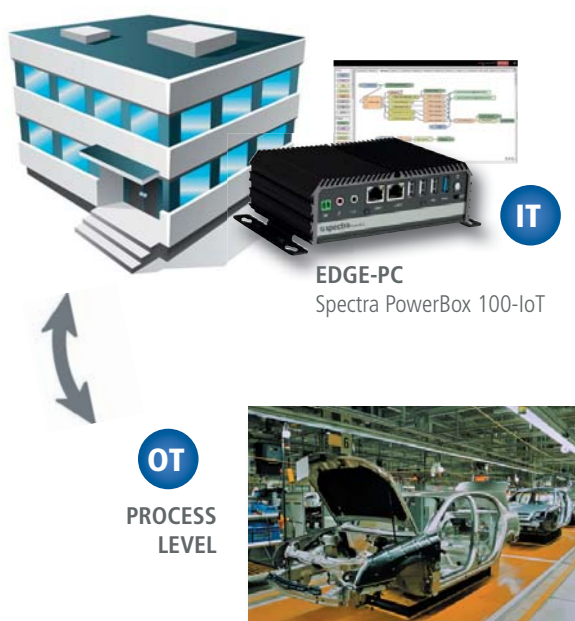
IIoT DEVELOPMENT SYSTEM / NODE RED

Node Red is a visual programming-tool for the fast and intuitive development of IIoT applications. Within the graphical editor different functional blocks ("flows") are connected ("wired") through their inputs and outputs. The execution of the created program is done by a single mouse-click ("deploy"). Online debugging and import of additional function blocks ("libraries") make the tool an open, powerful development system



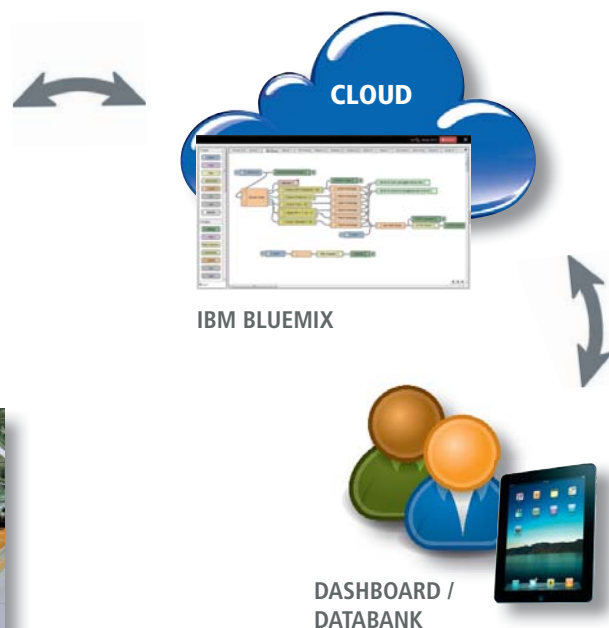
EDGE PC AT THE INTERSECTION OF OT AND IT

The Edge-PC located at the intersection between operational technology (OT) and information technology (IT) is a new and promising concept. It takes the role of binding the physical processes to local or public cloud services.



IIoT SERVICES

Please ask for software solutions or connectivity with web services like MS Azure or IBM Bluemix. Together with our partners we offer configuration and programming services for you.



SPECTRA POWERBOX 100-IoT

OPTIONAL MOUNTING KITS



DIN rail kit



VESA mount kit



Side mount kit

ORDERING INFORMATION

N° 147895 DIN rail kit for PB 100

N° 149025 VESA mount kit for PB 100

N° 147894 Side mount kit for PB 100

EQUIPMENT OPTIONS

The Spectra PowerBox 100-IoT can be expanded with additional interfaces thanks to a proprietary socket. Via the universal I/O bracket, the connections are then led out.

Please contact our sales department about your individual requirements.



COM



VGA



DVI



DP