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netFIELD OnPremise

Edge Gateway with remote management option

- → x86-processor-compatible Box PC that suits industrial needs
- → Preloaded 64-bit operating system, web front-end & container engines
- → Open for any containers based on x86/x64 architecture
- → Real-Time Ethernet support in the operating mode "Device"
- → Captures Real-Time Ethernet communication in the operating mode "Passive"



x86-computer platform for containerized applications

The netFIELD Edge devices are intelligent data routers between the operating (OT) and the information technology (IT) level of automated systems. They autonomously aggregate, process, or transmit IIoT information alongside established production and control processes utilizing freely loadable software packed in containers.

The devices' basis builds a secured Linux, a web configuration interface, and two independently operating container engines. Each device and one of the container engines can optionally be managed remotely over a platform. The digital workspace allows the 24/7 life cycle engineering of your distributed units and the containers from a central location. It reduces the management complexity to simple clicks of UI controls that allow you to face each of your upcoming remote IIoT projects with confidence.

The flexibility of the devices is suitable for all kinds of loT-supported industrial applications - whether you deploy your data mining code directly to the devices or shift data intelligence to any cloud in forwarding scenarios. In either case, those logics enable you to better understand plant patterns and relationships for optimization purposes or anomaly recognitions. Challenges like building digital twins and implementing downstream predictive maintenance and condition monitoring solutions can be accomplished with minimum effort in the shortest time.





Product Information

Order Information

Technical Data	Technical Data
Temperature (Operating Storage) ±0 +50 °C -20 +80 °C	Memory - 8 GB DDR3 RAM - 128 GB solid state disk drive: 64 GB application, 64 GB backup Docker - IoT Edge Docker: for remote and automatic deployment and maintenance of containers - Standard Docker: for manual and local deployment and maintenance of containers
Relative humidity (Operation) 10 93 %	
Operating Voltage 24 V DC ± 4.8 V DC / 60 W	
Consumption without USB (typical) 420 mA	
Consumption with USB	Local Device Manager Web-based GUI for local device parameterization
Connector	USB 3x USB 2.0 (500 mA), 1x USB 3.0 (900 mA), all USB max. 2 A
Dimensions (L x W x H)	Serial 2x RS-232/422/485 (can be configured)
214 × 85 × 157 mm Weight 2,3 kg	Display connectors DVI-I and DP (DisplayPort) Note: Use only 1:1 DVI or DP connectors. Adapters like DVI-I to
Housing Metal	VGA or DP to VGA are not supported by the device. IT Interface (Type LAN connector) 2x 10/100/1000 Mbit, Intel® I210AT 2 x RJ45 OT Interfaces (Type Connector) 10BASE-T/100BASE-TX, potential free, netX 100 2 x RJ45 Supported Protocols - PROFINET IO Device, EtherNet/IP Adapter, Standard TCP/IP (limited throughput) - Listening ("passive") mode: PROFINET, EtherCAT, Ethernet
Mounting	
Shock resistance	
50 G, half sine, 11 ms, IEC 60068-2-27 Vibration resistance - Random: 2 Grms @ 5~500 Hz, IEC 60068-2-64 - Sinusoidal: 2 Grms @ 5~500 Hz, IEC 60068-2-64	
Certification CE Sign, UKCA	Wi-Fi Single band 2.4 GHz IEEE 802.11n, 2x flexible antenna connection
Processor netX 100 / CPU: 2 GHz Celeron®, Intel® J1900	Security Booting of signed software, access via HTTPS, TLS
Operating system netFIELD OS based on Security Enhanced Linux	LED Indicators 12 LEDs
	Real-time clock Buffering, battery (service interval 10 years)
	Note: All technical data may be changed without further notice.

Product overview IT/OT Edge device for data-intensive and complex IoT applications with NIOT-E-TIJCX-GB-RE/NFLD 1321.300/NFLD demand on maximum performance, connectivity and memory size.



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