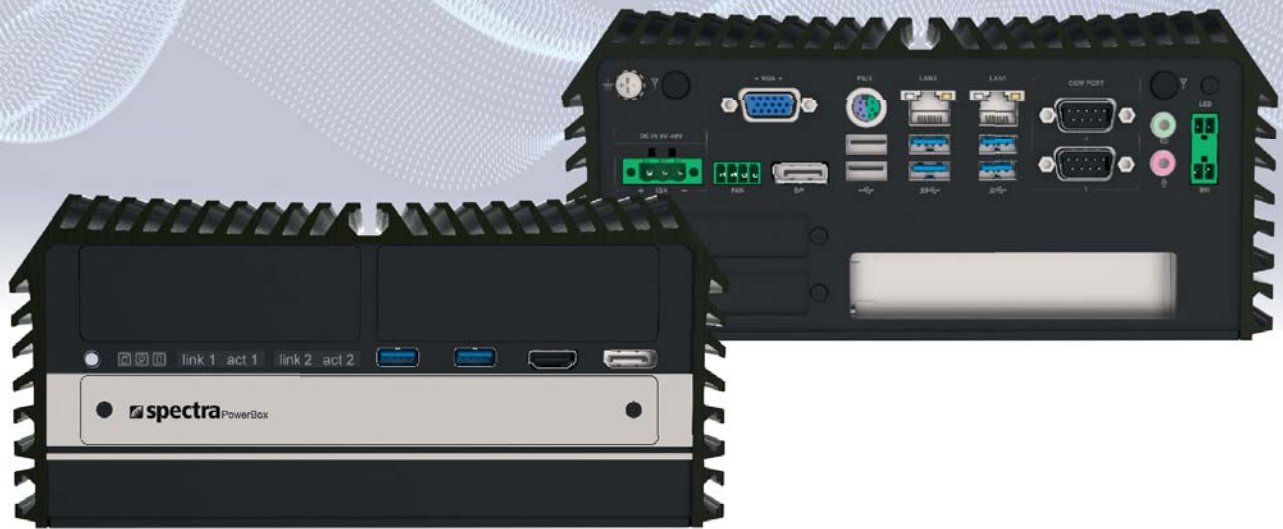




Industrial PC

Spectra PowerBox 3100E-Series

Industrial Box-PC | Comet Lake

Features

- Robust Box-PC in an attractive industry design
- Supports 10th Generation Intel® Xeon® & Core™ i7/i5/i3
- 1 PCIe(x16) Expansion Slot
- Sockets for various expansions (digital I/Os, Gigabit-LAN, WLAN, PoE, M12...)
- Wide range voltage: 9 – 48 V, with voltage monitoring
- Several flexible mounting and equipment possibilities (external fan, power adapter holder)

Spectra PowerBox 3100E-Series

Technical Data

Pre-defined Systems (pre-configured)

Modell	Spectra PowerBox 31E Essential 2	Spectra PowerBox 31E Essential 2 Wide Temp	Spectra PowerBox 31E Advanced 2	Spectra PowerBox 31E Advanced 2 Wide Temp
CPU	Intel® Core™ i3-10100TE 4 Cores / 8 Threads / Base Freq. 2.30 GHz / Burst Freq. 3.60 GHz		Intel® Core™ i5-10500TE 6 Cores / 12 Threads / Base Freq. 2.30 GHz / Burst Freq. 3.70 GHz	
RAM	8 GB	8 GB WT	8 GB	8 GB WT
SSD	256 GB 2.5" SATA-6G	256 GB 2.5" SATA-6G WT	256 GB 2.5" SATA-6G	256 GB 2.5" SATA-6G WT
Operating System	Microsoft® Windows® 11 IoT Enterprise LTSC 2024, 64-bit, german / english oder Microsoft® Windows® 10 IoT Enterprise LTSC 2021, 64-bit, german / english			
Operating Temperature	0°C ~ +45°C	-40°C ~ +70°C	0°C ~ +45°C	-40°C ~ +70°C

Basic Device / Barebone (unconfigured)

Motherboard with Processor Support for	Intel® Xeon® Series Processor (80W / 35W): - Intel® Xeon® W-1270E 8 Cores Up to 4.8 GHz, TDP 80W - Intel® Xeon® W-1250E 6 Cores Up to 4.7 GHz, TDP 80W - Intel® Xeon® W-1290TE 10 Cores Up to 4.5 GHz, TDP 35W - Intel® Xeon® W-1270TE 8 Cores Up to 4.4 GHz, TDP 35W - Intel® Xeon® W-1250TE 6 Cores Up to 3.8 GHz, TDP 35W Intel® Core® Series Processor (65W / 35W): - Intel® Core™ i9-10900E 10 Cores Up to 4.7 GHz, TDP 65W - Intel® Core™ i7-10700E 8 Cores Up to 4.5 GHz, TDP 65W - Intel® Core™ i5-10500E 6 Cores Up to 4.2 GHz, TDP 65W - Intel® Core™ i3-10100E 4 Cores Up to 3.8 GHz, TDP 65W - Intel® Core™ i9-10900TE 10 Cores Up to 4.5 GHz, TDP 35W - Intel® Core™ i7-10700TE 8 Cores Up to 4.5 GHz, TDP 35W - Intel® Core™ i5-10500TE 6 Cores Up to 3.7 GHz, TDP 35W - Intel® Core™ i3-10100TE 4 Cores Up to 3.6 GHz, TDP 35W
Chipset	Intel W480E
Memory Socket	2x DDR4 2933/2666/2400 SO-DIMM Socket, max. 64 GB (Xeon / i9 / i7 Supports Up to 2933MHz , i5 / i3 Supports Up to 2666 MHz)

Controllers & Interfaces

Ethernet	1 x Intel® i210 Gigabit-LAN, 1 x Intel® i219 Gigabit-LAN
Graphics	integrated in CPU
Audio	Realtek ALC888-GR
Front IOs	2 x USB 3.2 Gen 2 1 x HDMI (4096 x 2160 4K) 1 x DP (4096 x 2304 4K)
Rear IOs	4 x USB 3.2 Gen 1, 2 x USB 2.0 2 x RJ45 2 x RS-232/422/485 1 x DP (4096 x 2304 4K), 1 x VGA (1920 x 1200 WUXGA) 1 x Line-out, 1 x Mic-in, 1 x PS/2

Drives & Expansions

Free Storage Slots	1 x 2,5" SATA HDD/SSD (Hot-Swap), 1 x PCIe4 NVMe Key M 2280 M.2, 3 x mSATA (mPCIe Slot), 2 x SIM
PCI/PCIe Slots	1 x PCIe (x16)
mPCIe Slots	3 x Full-Size for WiFi / GSM or expansion cards
Antenna Holes	2 x for wireless communication

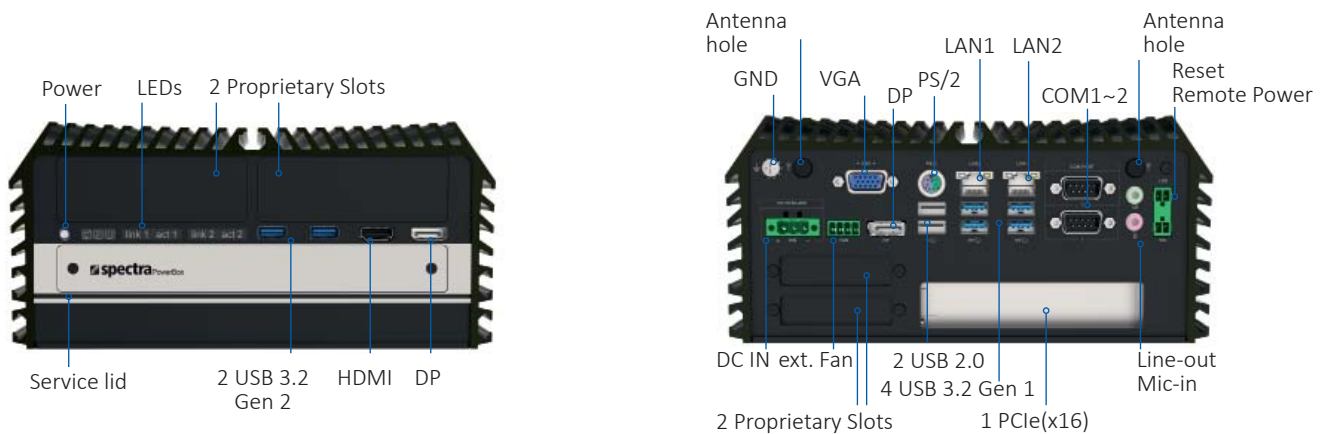
Spectra PowerBox 3100E-Series

Technical Data

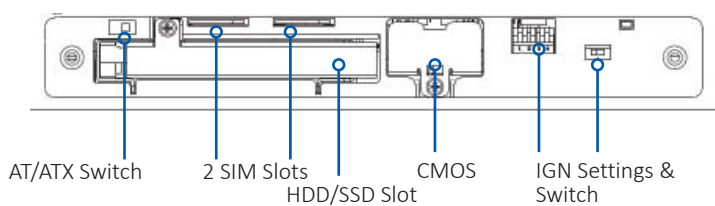
Further Data

Power	AT/ATX 9~48 V DC
Dimensions (W x H x D)	227 x 108 x 261 mm
Weight (net/gross)	5,7 kg / 8,1 kg
Mounting	Wall
Warranty	24 months
Packing List	1 x Power Terminal Block (female), 1 x Remote Power Terminal Block, 1 x Fan Terminal Block, 1 x Driver/Manual Medium, 1 x Microsoft® Windows® Recovery Medium, 2 x rails for Wall mount, 1 x DVI to VGA Adapter

Interfaces



Details Service lid



Futher models of the Spectra PowerBox 30E-Series



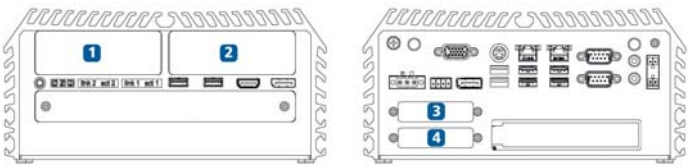
Spectra PowerBox 30E
without Expansion Slot



Spectra PowerBox 32E
with 2x PCIe Slots

Spectra PowerBox 3100E-Series

Extended Equipement



Multi-IO Modules

and possible assignment of the expansion slots

	1	2	3	4
4 x Intel I210 1GbE LAN, RJ45 Variants: M12 A-Coded, M12 X-coded connector	✓	✓	—	—
2 x Intel X550 10GbE LAN, RJ45	✓	—	—	—
16 DIO (8 x in / 8 x out)	✓	✓	—	—
4 x RS-232/422/485, DB9*	✓	✓	—	—
4 x RS-232, DB9, isoliert*	✓	✓	—	—
2 x RS-232, DB9	—	—	✓	✓
2 x LAN, RJ45	—	—	✓	✓
2 x USB 3.2 Gen 1	—	—	✓	✓



* Max. 1 COM Module per System possible

Further optional accessories

- External fan, 4-pin Terminal Block
- Riser card alternative: 1x PCI
- PoE Control Function, 25.5 W/Port
- Power Ignition Sensing, 12V/24V selectable
- Power Adapter:
 - 120W 24V/5A (with 35W CPUs)
 - 220W 24V/9.2A (when operating 65W CPUs / Expansion modules)
 - 360W 48V/7.5A (when using PoE Funktion)



Ask us!



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Dimensions

(Unit: mm)

