KBox B-301-RPL

Powerful AI Wall Mount Industrial PC



Industrial Computer Platform for AI Applications

- Powerful workstation for machine learning, AI workflows and graphics-hungry applications
- Based on Kontron µATX motherboard with high-performance 14th Gen Intel® Core™ i3/i5/i7/i9 processors
- High-bandwidth PCIe interfaces for advanced networking and graphics solutions
- Industrial-grade: shock/vibration resistant, 24/7, long-term availability
- Optimized wall mount form factor

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The Power of IoT

Product Highlights

The KBox B-301-RPL is a robust high-end IPC based on a µATX motherboard designed and manufactured in Germany with 14th Gen Intel® Core™ processors. The powerful IPC can be supplemented with fast NVIDIA GPUs, making it perfect as a central control unit for highly complex applications. These include applications with high demands on 3D graphics or vision and AI workflows with minimal cycle times.

At the heart of the industrial PC is the µATX motherboard, also developed and manufactured by Kontron in Germany, with high-performance 14th Gen Intel® Core™ i3/i5/i7/i9 processors with up to 24 cores (8 performance cores and 16 efficient cores) based on Intel® Performance Hybrid Architecture. These processors are characterized by impressive computing power and thus form the basis for demanding real-time applications, machine learning, or the processing of large amounts of data.

Technical Information

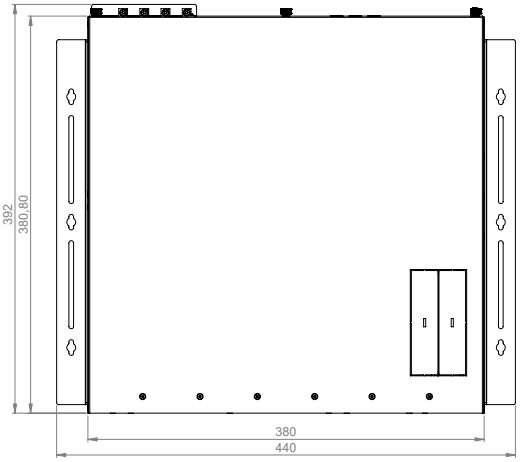
SYSTEM	KBox B-301-RPL
DIMENSION	(HxWxD) 392 x 380 (440 incl. bracket) x 176,3 mm
WEIGHT	Approx. 10 kg
PROCESSOR	14th Gen Intel® Core™ i9/i7/i5/i3 series
CHIPSET	Q670E on Kontron K3841-Q µATX Board
RAM	4x UDIMM DDR5 up to 128 GByte, dual channel, non ECC
TPM	TPM 2.0 on board
TOP I/OS	1x 1 Gigabit LAN, 2x 2.5 Gigabit LAN, 4x USB 3.2 Gen1, 2x USB 3.2 Gen2, 1x USB-C 3.2 Gen2, 4x DP1.4a, 1x RS232, Line-in, Line-out, MIC-in
DRIVE OPTIONS	up to 2 x 3.5" SATA drive bays for 3,5" drives or hot swap / internal 2,5" drives boxes, optional RAID support 0/1/5/10
M.2	2x M.2 2230/2242/2280 (Key-M, PCIe/NVME SSD modules), incl. NVME RAID support 1x M.2 2230 (Key-E, WLAN/for Bluetooth modules, incl. CNVi support)
POWER SUPPLY	100-240 V AC 600 W, optionally 100-240 VAC 850W (80+); 550 W redundant PSU
EXPANSION SLOTS	1x 16 lanes, Gen5 1x 4 lanes, Gen4 "open slot" 1x 1 lane, Gen3 "open slot" 1x 1 lane, Gen4, "closed slot"
EXPANSION CARDS	NVIDIA A1000, RTX 4000 Ada, 2/4 x GByte LAN, 2x 10 GByte LAN, RAID Contoller, others on request
CERTIFICATIONS	CE, UKCA, FCC, NRTL (TÜV SÜD EN 62368-1), CB (IEC 62368-1)
ALTITUDE	5000 m operating
SHOCK* ACCORDING TO EN 60068-2-27	Operating: 15 G 11 ms duration Non-operating: 30 G 11 ms duration
VIBRATION ACCORDING TO EN 60068-2-6	Operating: 10-150 Hz: 1G/3 axis Non-operating: 10-150 Hz: 2G/3 axis
OPERATING TEMPERATURE	0 °C to +50 °C continuous operation
STORAGE TEMPERATURE	-20 °C to +70 °C
HUMIDITY	10 % to 93 % @40 °C, non-condensing
MTBF	> 50.000 h
VERIFIED OS	Windows 11 64 bit LTSC, optional Linux

*) no HDD

Dimensions



Wall-Mount



Dimensions (incl. brackets)

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