

KBox E-430-RPL/RPH



Fanless Industrial Computer with 13th Gen Intel® Core™ U-Series Processors

- Enhanced computing and graphics performance with native AI inferencing capabilities
- Time Coordinated Computing / Time Sensitive Networking for real-time control
- 8K UHD video output support
- Rugged design against environmental disturbances: temperature, dust, vibration & shock
- Hardware-based protection against malware and sophisticated cyberattacks

Fanless Industrial Computer with 13th Gen Intel® Core™ U-Series Processors

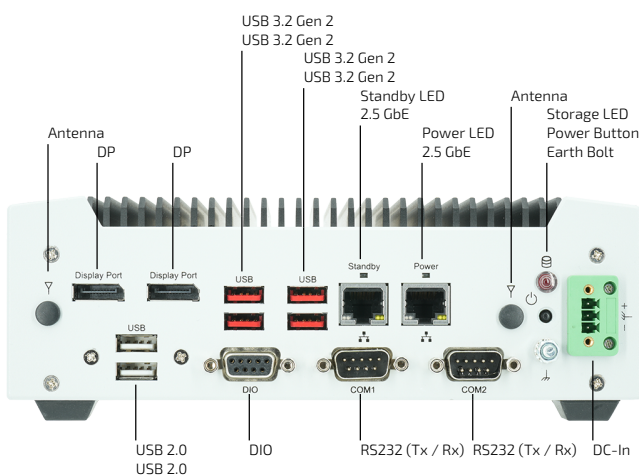
KBox E-430-RPL/RPH is a fanless industrial computer platform powered by 13th Generation Intel® Core™ U-Series and Intel® U300 Series processors which deliver better performance for 8K UHD workflows and AI inferencing. In addition, the system supports up to

four 2.5 GbE LAN ports with TSN capabilities as well as expansion possibilities for WLAN (Wi-Fi or CNVi Wi-Fi) and WWAN (3G, 4G or 5G). Thus, it can provide low-latency multi-connections for IoT, IIoT and AIoT related applications.

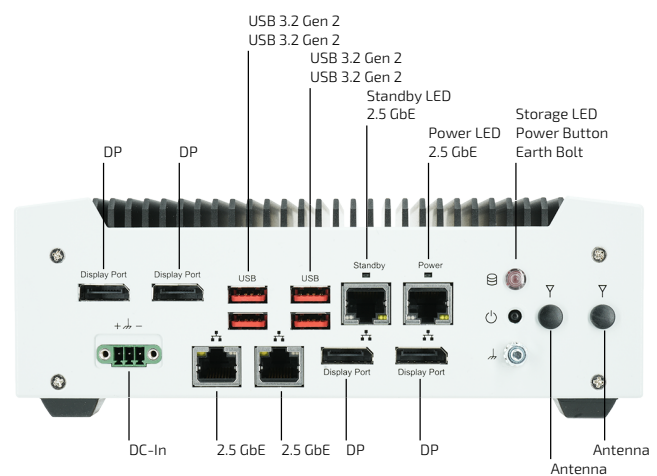
- 13th Generation Intel® Core™ U-Series Processors
- Intel® U300 Series Processor
- 2x DDR5 SO-DIMM memory socket
- Two LAN I/O configurations with TSN for real-time Ethernet
 - 2x 2.5 GbE LAN
 - 4x 2.5 GbE LAN
- Four video I/O configurations for up to 8K display support
 - 2x DP
 - 4x DP
 - 1x DP + 1x HDMI 2.0
 - 3x DP + 1x HDMI 2.0
- 4x USB 3.2 Gen 2, up to 2x USB 2.0 for USB device connection
- Up to 2x RS232 (Tx / Rx only) for serial device connection
- Up to 1x 8-bit DIO (4x DI + 4x DO) for device / signal control

- 1x SATA 3.0 HDD / SSD support
- 1x M.2 Key B for SSD, WWAN expansion
- 1x M.2 Key E for WLAN and Bluetooth expansion
- 1x M.2 Key M for SSD expansion
- dTPM 2.0 support for stronger security
- Passive cooling design without fans nor vents
- Wide voltage input range: DC 9 V ~ 36 V / 11 V ~ 32 V
- Extended temperature model available: -40 °C ~ 65 °C
- Flexible mounting options
 - Vertical / horizontal DIN-rail mount
 - Vertical / horizontal wall mount
 - Vertical / horizontal VESA mount
 - Desktop

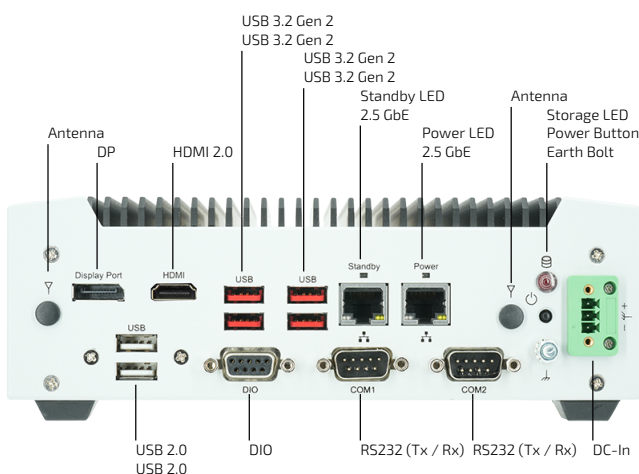
➤ KBox E-430-RPL Configuration 1



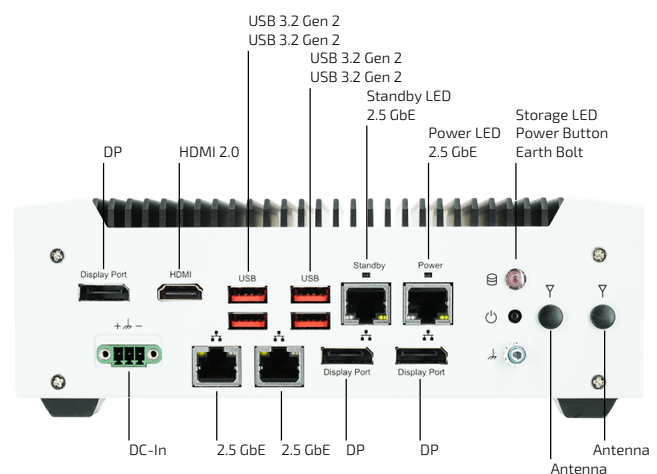
➤ KBox E-430-RPL Configuration 2



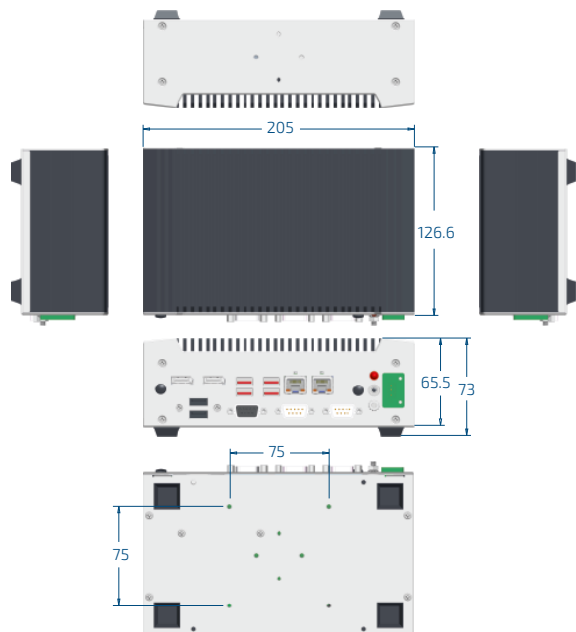
➤ KBox E-430-RPH Configuration 1



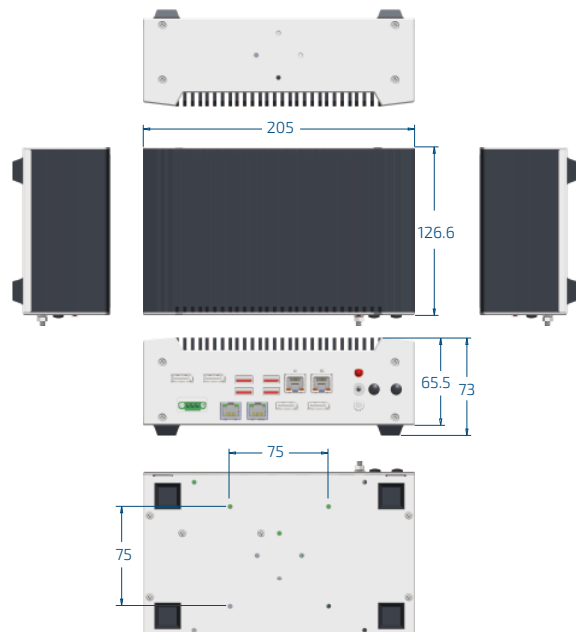
➤ KBox E-430-RPH Configuration 2



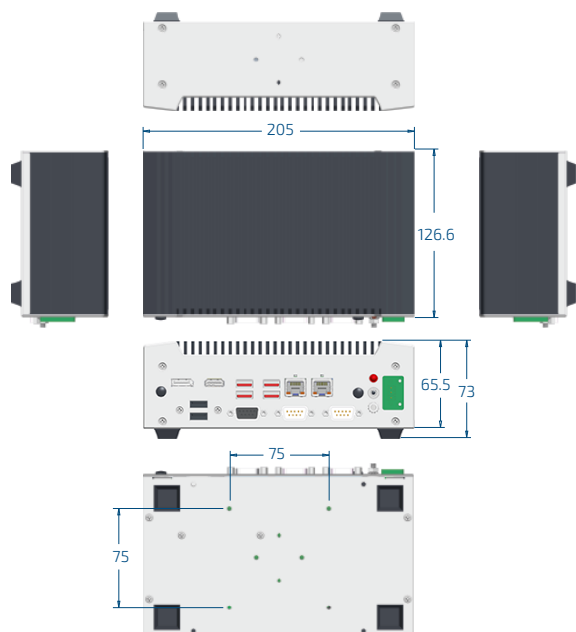
► KBox E-430-RPL Configuration 1



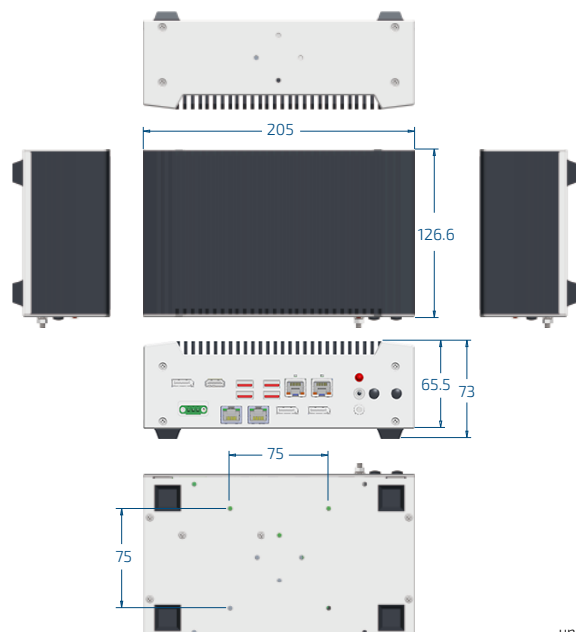
► KBox E-430-RPL Configuration 2



► KBox E-430-RPH Configuration 1



► KBox E-430-RPH Configuration 2



unit: mm

SYSTEM	PROCESSOR	Intel® Core™ i7-1365UE (Deca Core, 12M Cache, 1.7 / 4.9 GHz, FCBGA1744, 15 W TDP) Intel® Core™ i5-1345UE (Deca Core, 12M Cache, 1.4 / 4.6 GHz, FCBGA1744, 15 W TDP) Intel® Core™ i3-1315UE (Hexa Core, 10M Cache, 1.2 / 4.5 GHz, FCBGA1744, 15 W TDP) Intel® U300E (Penta Core, 8M Cache, 1.1 / 4.3 GHz, FCBGA1744, 15 W TDP) Intel® Core™ i7-1365URE (Deca Core, 12M Cache, 1.7 / 4.9 GHz, FCBGA1744, 15 W TDP) Intel® Core™ i5-1345URE (Deca Core, 12M Cache, 1.4 / 4.6 GHz, FCBGA1744, 15 W TDP) Intel® Core™ i3-1315URE (Hexa Core, 10M Cache, 1.2 / 4.5 GHz, FCBGA1744, 15 W TDP) 2x DDR5 5200 S0-DIMM up to 96 GByte
	MEMORY	
VIDEO	GRAPHICS DISPLAY INTERFACE	Intel® Iris® X* Graphics 1x DP (7680 x 4320 @ 60 Hz, KBox E-430-RPH Configuration 1) 2x DP (7680 x 4320 @ 60 Hz, KBox E-430-RPL Configuration 1) 3x DP (7680 x 4320 @ 60 Hz, KBox E-430-RPH Configuration 2) 4x DP (7680 x 4320 @ 60 Hz, KBox E-430-RPL Configuration 2) 1x HDMI 2.0 (4096 x 2304 @ 60 Hz, KBox E-430-RPH Configuration 1/2) Dual Display (KBox E-430-RPL/RPH Configuration 1) Quadruple Display (KBox E-430-RPL/RPH Configuration 2)
	MULTIPLE DISPLAY	
NETWORK CONNECTION	ETHERNET	2x 2.5 GbE LAN (RJ45, Intel® I226-LM/IT, TSN support*, -RPL/RPH Config. 1) 4x 2.5 GbE LAN (RJ45, Intel® I226-LM/IT, TSN support*, -RPL/RPH Config. 2)
PERIPHERAL CONNECTION	USB	4x USB 3.2 Gen 2 (Type A) 2x USB 2.0 (Type A, KBox E-430-RPL/RPH Configuration 1) 2x RS232 (DB9, Rx / Rx only, KBox E-430-RPL/RPH Configuration 1) 1x 8-bit DIO (DB9 Female, 4x DI + 4x DO, KBox E-430-RPL/RPH Configuration 1)
	SERIAL PORT OTHER I/Os	
STORAGE & EXPANSION	SATA M.2	1x 2.5" SATA 3.0 HDD / SSD support 1x M.2 Key B (Type 2242/3042/3052/2280, w/ PCIe x1 / USB 2.0 / SATA / UIM) 1x M.2 Key E (Type 2230, w/ PCIe x1 / USB 2.0 / CNVi) 1x M.2 Key M (Type 2280, w/ PCIe x4) 1x SIM Card Holder (optional, by header)
	SIM CARD HOLDER	
POWER	INPUT VOLTAGE	DC 9 V ~ 36 V (KBox E-430-RPL/RPH Configuration 1) DC 11 V ~ 32 V (KBox E-430-RPL/RPH Configuration 2)
	CONNECTOR	3-pin Terminal Block
FIRMWARE	BIOS WATCHDOG H/W MONITOR REAL TIME CLOCK SECURITY	AMI uEFI BIOS w/ 256 Mb SPI Flash Programmable WDT to generate system reset event Voltages, Temperatures Processor integrated RTC TPM 2.0 Support (Infineon SLB 9672)
SYSTEM CONTROL & MONITORING	BUTTON, SWITCH & INDICATOR	1x Power Button 1x Storage LED 1x Power LED 1x Standby LED
COOLING	COOLING METHOD	Passive
SOFTWARE	OS SUPPORT	Windows 11, Windows 10, Linux
MECHANICAL	CONSTRUCTION DIMENSION (W x D x H) WEIGHT MOUNTING	Aluminum Metal Chassis 205 mm x 126.6 mm x 65.5 mm / 8.07" x 4.98" x 2.58" 2,000 g / 4.41 lb Vertical / horizontal DIN-rail mount Vertical / horizontal wall mount Vertical / horizontal VESA mount (75 mm x 75 mm) Desktop
ENVIRONMENTAL	OPERATING TEMPERATURE	0 °C ~ 50 °C / 32 °F ~ 122 °F (Standard) -40 °C ~ 65 °C / -40 °F ~ 149 °F (Extended)
	STORAGE TEMPERATURE	-20 °C ~ 80 °C / -4 °F ~ 176 °F (Standard) -55 °C ~ 85 °C / -67 °F ~ 185 °F (Extended)
	HUMIDITY	0 % ~ 95 %
COMPLIANCE	EMC	CE Class B, FCC Class B, ICES Class B, UKCA Class B

* TSN support only for models with Core™ URE Series processors

Ordering Information

ARTICLE	PROCESSOR	DP	HDMI	LAN	USB 2.0	RS232	DIO	DC-IN	OP. TEMP.
KBox E-430-RPL-0-i7-1365UE	Intel® Core™ i7-1365UE	2	-	2	2	2	1	9 ~ 36 V	0 ~ 50 °C
KBox E-430-RPL-1-i5-1345UE	Intel® Core™ i5-1345UE	2	-	2	2	2	1	9 ~ 36 V	0 ~ 50 °C
KBox E-430-RPL-2-i3-1315UE	Intel® Core™ i3-1315UE	2	-	2	2	2	1	9 ~ 36 V	0 ~ 50 °C
KBox E-430-RPL-3-U300E	Intel® U300E	2	-	2	2	2	1	9 ~ 36 V	0 ~ 50 °C
KBox E-430-RPL-4-i7-1365URE-ET	Intel® Core™ i7-1365URE	2	-	2	2	2	1	9 ~ 36 V	-40 ~ 65 °C
KBox E-430-RPL-5-i5-1345URE-ET	Intel® Core™ i5-1345URE	2	-	2	2	2	1	9 ~ 36 V	-40 ~ 65 °C
KBox E-430-RPL-6-i3-1315URE-ET	Intel® Core™ i3-1315URE	2	-	2	2	2	1	9 ~ 36 V	-40 ~ 65 °C
KBox E-430-RPL-7-i7-1365UE-GPA	Intel® Core™ i7-1365UE	4	-	4	-	-	-	11 ~ 32 V	0 ~ 50 °C
KBox E-430-RPL-8-i5-1345UE-GPA	Intel® Core™ i5-1345UE	4	-	4	-	-	-	11 ~ 32 V	0 ~ 50 °C
KBox E-430-RPL-9-i3-1315UE-GPA	Intel® Core™ i3-1315UE	4	-	4	-	-	-	11 ~ 32 V	0 ~ 50 °C
KBox E-430-RPL-A-U300E-GPA	Intel® U300E	4	-	4	-	-	-	11 ~ 32 V	0 ~ 50 °C
KBox E-430-RPL-B-i7-1365URE-GPA-ET	Intel® Core™ i7-1365URE	4	-	4	-	-	-	11 ~ 32 V	-40 ~ 65 °C
KBox E-430-RPL-C-i5-1345URE-GPA-ET	Intel® Core™ i5-1345URE	4	-	4	-	-	-	11 ~ 32 V	-40 ~ 65 °C
KBox E-430-RPL-D-i3-1315URE-GPA-ET	Intel® Core™ i3-1315URE	4	-	4	-	-	-	11 ~ 32 V	-40 ~ 65 °C

(Variants of KBox E-430-AMH/ADH are on a per-request basis. Contact your account manager for details.)

Accessories

ARTICLE	DESCRIPTION
POWER ADAPTER*	AC 90 V ~ 264 V to DC 19 V @ 4.74 A max. 90 W, open wire
POWER CORD*	EU / US / UK / JP / CN / AU type depending on country
DIN RAIL KIT*	1x DIN rail clamp, 1x DIN rail clamp adapter, 5x screw
VESA MOUNT KIT*	2x bracket (hole pattern: 75 mm x 75 mm / 100 mm x 100 mm), 4x screw
VERTICAL WALL MOUNT PLATE*	1x bracket
HORIZONTAL WALL MOUNT KIT*	2x bracket, 4x screw
WI-FI + BLUETOOTH EXPANSION KIT*	Wi-Fi 2.4 GHz / 5 GHz + Bluetooth 4.0 Class I, M.2 Key-A/E interface, 2x antenna

The asterisk (*) means optional item.

Product Contact Point

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