KBox E-210 SERIES FANLESS & 4K UHD SUPPORT





FANLESS BOX PC WITH 7TH / 6TH GEN INTEL® CORE™ / CELERON® U-SERIES CPU

- ► 1x HDMI 2.0, 1x DP for display output
- > 2x GbE LAN for Ethernet
- ► 4x USB 3.0, 2x RS232/422/485, 1x DIO for peripheral connection
- ► 1x 2.5" SATA 3.0 HDD / SSD Slot for storage
- ► 1x mPCle, 1x M.2 for expansion



KBox E-210 SERIES

FANLESS BOX PC WITH 7TH / 6TH GENERATION INTEL® CORE™ / CELERON® U-SERIES PROCESSORS

Power by 7th / 6th Generation Intel® Core™ / Celeron® U-Series Processors, KBox E-210 Series is a fanless box PC that can deliver excellent processing and graphical performance to respond to the requirements for the state-of-the-art applications. Equipped with one HDMI 2.0 port, it supports 4K resolution, higher data rate, wider bandwidth and ultra-wide display, making it an ideal platform for digital signage or audio / video data intensive applications.

It has one 2.5" SATA 3.0 HDD / SSD supported, allowing double read / write speed. In addition, a M.2 socket enables multi-functional integration, such as satellite navigation, WWAN and SSDs.

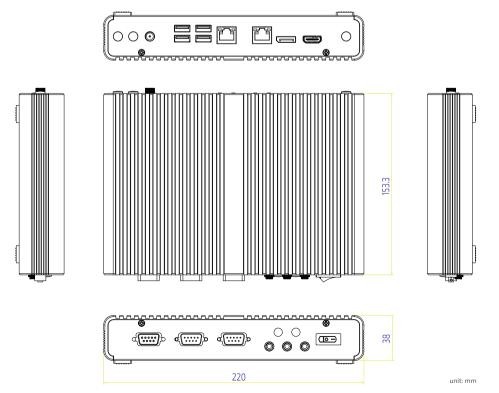
Finally, it is enclosed within a rugged aluminum chassis with ventilation slots, allowing it installed outsides without fear of dust ingress.

▶ PRODUCT HIGHLIGHTS

- ► 7th / 6th Gen Intel® Core™ / Celeron® U-Series Processors
- > 2x DDR4 SO-DIMM memory socket
- ▶ 1x DP, 1x HDMI 2.0 for video output
- 2x GbE LAN for Ethernet
- ► 4x USB 3.0 for USB device connection
- > 2x RS232/422/485 for serial device connection
- ▶ 1x DIO for device / signal control
- ▶ 1x 2.5" SATA 3.0 HDD / SSD for storage
- ▶ 1x mPCle for WLAN / Bluetooth / WWAN expansion
- ► 1x M.2 Key B for SSD / WWAN expansion
- Passive cooling design without fans and vents
- Extended temperature model available: -20 °C ~ 70 °C



MECHANICAL DIMENSIONS



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► TECHNICAL INFORMATION

VIDEO GRAPHICS Intel® HD Graphics S20 (Skylake Care To CPU) Intel® HD Graphics G10 (Skylake Care To CPU) Intel® HD Graphics G10 (Skylake Care To CPU) Intel® HD Graphics G10 (Skylake Care To CPU) Intel® HD Graphics G20 (Skylake Care To CPU) Intel® HD Gaze To Care	SYSTEM	PROCESSOR MEMORY	Intel® Skylake Core™ i5-6300U (Dual Core, 3M Cache, up to 3.00 GHz, FCBGA1356, 15 W TDP) Intel® Kaby Lake Core™ i5-7300U (Dual Core, 3M Cache, up to 3.50 GHz, FCBGA1356, 15 W TDP) Intel® Kaby Lake Core™ i7-7600U (Dual Core, 4M Cache, up to 3.90 GHz, FCBGA1356, 15 W TDP) Intel® Kaby Lake Celeron® 3965U (Dual Core, 2M Cache, 2.20 GHz, FCBGA1356, 15 W TDP) Intel® Kaby Lake Core™ i3-7100U (Dual Core, 3M Cache, 2.40 GHz, FCBGA1356, 15 W TDP) 2x DDR4 2133 1.2 V SO-DIMM up to 32 GByte
AUDIO INTERFACE 1x Linein (on front) 1x Lineout (on front) 1x Lineout (on front) 1x Lineout (on front) 1x Line-out (on front)	VIDEO	DISPLAY INTERFACE	Intel® HD Graphics 610 (Kaby Lake Celeron® CPU) Intel® HD Graphics 620 (Kaby Lake Core™ CPU) 1x HDMI 2.0 (on rear, 4096 x 2160 @ 60 Hz) 1x DP (on rear, 4096 x 2304 @ 60 Hz)
PERIPHERAL CONNECTION USB SERIAL PORT OTHER I/OS STORAGE & EXPANSION SATA mPCIe M.2 INPUT VOLTAGE CONNECTOR INPUT VOLTAGE CONNECTOR BIOS WATCHDOG H/W MONITOR REAL TIME CLOCK TPM IAMT SYSTEM CONTROL & MONITORING BUTTON, SWITCH & INDICATOR BUTTON, SWITCH & INDICATOR SYSTEM CONTROL & MONITORING COOLING COOLING COOLING COOLING COOLING CONSECUTION DIMENSIONS (W x D x H) WEIGHT MOUNTING ENVIRONMENTAL DEPARTION TEMPERATURE STORAGE TEMPERATURE HUMIDITY ALV USB 3.0 (Type A on rear) 2x RS232/422/485 (DB9 on front) 1x 2.5° SATA 3.0 HDD / SSDD 1x mPCIe Socket (full size) 1x M2 Key B Socket (type 2242) DC 12 V (default) DC 1	AUDIO		1x Line-in (on front) 1x Line-out (on front)
SERIAL PORT OTHER I/Os STORAGE & EXPANSION SATA mPCIe M.2 INPUT VOLTAGE CONNECTOR BIOS WATCHDOG H./W MONITOR REAL TIME CLOCK TPM IAMT SYSTEM CONTROL & MONITORING BUTTON, SWITCH & INDICATOR SYSTEM CONTROL & MONITORING COOLING COO	NETWORK CONNECTION	ETHERNET	2x GbE LAN (RJ45 on rear, 1x Intel® I219-LM, 1x Intel® I210-AT)
M2 N=PCIe N=2 N=N=Zee N=2 N=N=Zee N=2 N=N=Zee N=2 N=N=Zee N=N=Z	PERIPHERAL CONNECTION	SERIAL PORT	2x RS232/422/485 (DB9 on front)
CONNECTOR CONNECTOR DC 24 V or other options (by request) Lockable DC Jack (on rear) Lockable DC Jack (on rear) WATCHDOG H/W MONITOR REAL TIME CLOCK TPM iAMT SUPPORTED THE PROVINGE OF T	STORAGE & EXPANSION	mPCle	1x mPCIe Socket (full size)
WATCHDOG H/W MONITOR REAL TIME CLOCK TPM IAMT SYSTEM CONTROL & MONITORING BUTTON, SWITCH & INDICATOR COOLING COOLING COOLING COOLING METHOD DIMENSIONS (W x D x H) WEIGHT MOUNTING ENVIRONMENTAL COPERATION TEMPERATURE HUMIDITY Programmable WDT to generate system reset event Voltages, Temperatures Processor integrated RTC Supported for models w/ Core™ i7 / i5 (Infineon SLB 9665 TPM 2.0) Supported for models w/ Core™ i7 / i5 1x Power Switch (on front) 1x Power LED (on front) 1x Power LED (on front) 1x Storage LED (on front) 1x Power Switch (on front) 1x Power S	POWER		DC 24 V or other options (by request)
MONITORING INDICATOR 1x Power LED (on front) 1x Storage LED (on front) 1x Storage LED (on front) 1x Storage LED (on front) Passive SOFTWARE OS SUPPORT Windows 10, Linux Aluminum Chassis 220 mm x 153.3 mm x 38 mm / 8.66" x 6.04" x 1.50" 1600 g / 3.53 lb VESA Mount ENVIRONMENTAL OPERATION TEMPERATURE 5TORAGE TEMPERATURE HUMIDITY 1x Power LED (on front) 1x Storage LED (on	FIRMWARE	WATCHDOG H/W MONITOR REAL TIME CLOCK TPM	Programmable WDT to generate system reset event Voltages, Temperatures Processor integrated RTC Supported for models w/ Core™ i7 / i5 (Infineon SLB 9665 TPM 2.0)
SOFTWARE OS SUPPORT Windows 10, Linux MECHANICAL CONSTRUCTION DIMENSIONS (W x D x H) WEIGHT MOUNTING Aluminum Chassis 220 mm x 153.3 mm x 38 mm / 8.66" x 6.04" x 1.50" 1600 g / 3.53 lb VESA Mount ENVIRONMENTAL OPERATION TEMPERATURE STORAGE TEMPERATURE HUMIDITY 0 °C ~ 50 °C / 32 °F ~ 122 °F (Standard) -20 °C ~ 70 °C / -4 °F ~ 158 °F (Extended) -20 °C ~ 80 °C / -4 °F ~ 176 °F 0 % ~ 90 %			1x Power LED (on front)
MECHANICAL CONSTRUCTION DIMENSIONS (W x D x H) WEIGHT MOUNTING Aluminum Chassis 220 mm x 153.3 mm x 38 mm / 8.66" x 6.04" x 1.50" 1600 g / 3.53 lb VESA Mount ENVIRONMENTAL OPERATION TEMPERATURE HUMIDITY 0 °C ~ 50 °C / 32 °F ~ 122 °F (Standard) -20 °C ~ 70 °C / -4 °F ~ 158 °F (Extended) -20 °C ~ 80 °C / -4 °F ~ 176 °F 0 % ~ 90 %	COOLING	COOLING METHOD	Passive
DIMENSIONS (W x D x H) WEIGHT MOUNTING DPERATION TEMPERATURE STORAGE TEMPERATURE HUMIDITY DIMENSIONS (W x D x H) WEIGHT 1600 g / 3.53 lb VESA Mount 1600 g / 3.53 lb VESA Mount O °C ~ 50 °C / 32 °F ~ 122 °F (Standard) -20 °C ~ 70 °C / -4 °F ~ 158 °F (Extended) -20 °C ~ 80 °C / -4 °F ~ 176 °F 0 % ~ 90 %	SOFTWARE	OS SUPPORT	Windows 10, Linux
$-20 ^{\circ}\text{C} \sim 70 ^{\circ}\text{C} / -4 ^{\circ}\text{F} \sim 158 ^{\circ}\text{F} \text{(Extended)}$ $-20 ^{\circ}\text{C} \sim 80 ^{\circ}\text{C} / -4 ^{\circ}\text{F} \sim 176 ^{\circ}\text{F}$ HUMIDITY $0 \% \sim 90 \%$	MECHANICAL	DIMENSIONS (W x D x H) WEIGHT	220 mm x 153.3 mm x 38 mm / 8.66" x 6.04" x 1.50" 1600 g / 3.53 lb
CERTIFICATION EMC & SAFETY CE Class A, FCC Class A	ENVIRONMENTAL	STORAGE TEMPERATURE	-20 °C ~ 70 °C / -4 °F ~ 158 °F (Extended) -20 °C ~ 80 °C / -4 °F ~ 176 °F
	CERTIFICATION	EMC & SAFETY	CE Class A, FCC Class A

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ARTICLE	DESCRIPTION
KBox E-210	Intel® Skylake Core™ i5-6300U, w/ TPM, Operating temperature: 0 °C ~ 50 °C
KBox E-213	Intel® Kaby Lake Core™ i5-7300U, w/ TPM, Operating temperature: 0 °C ~ 50 °C
KBox E-214	Intel® Kaby Lake Core™ i7-7600U, w/ TPM, Operating temperature: 0 °C ~ 50 °C
KBox E-215	Intel® Kaby Lake Celeron® 3965U, w/o TPM, Operating temperature: 0 °C \sim 50 °C
KBox E-216	Intel® Kaby Lake Core™ i3-7100U, w/o TPM, Operating temperature: 0 °C ~ 50 °C
KBox E-213-ET	Intel® Kaby Lake Core™ i5-7300U, w/ TPM, Operating temperature: -20 °C ~ 70 °C
KBox E-214-ET	Intel® Kaby Lake Core™ i7-7600U, w/ TPM, Operating temperature: -20 °C ~ 70 °C
KBox E-215-ET	Intel® Kaby Lake Celeron® 3965U, w/o TPM, Operating temperature: -20 °C ~ 70 °C
KBox E-216-ET	Intel® Kaby Lake Core™ i3-7100U, w/o TPM, Operating temperature: -20 °C ~ 70 °C

ACCESSORIES

ARTICLE	PART NO.	DESCRIPTION
SATA DATA / POWER CABLE	0C5020000004860L	7+15P, 150 mm (Pre-installed in the system)
POWER ADAPTER	010902WDS060101L	Input: AC 100 V ~ 240 V, Output: 12 V, 60 W, w/ lock (standard temp.)
(depending on model)	010902GST60A101L	Input: AC 100 V \sim 240 V, Output: 12 V, 60 W, w/ lock (extended temp.)
POWER CORD	0C5060000000020L	EU type
(depending on country)	0C5060000000030L	US type
	0C5060000000040L	UK type
	0C5060000000070L	JP type
	0C5060000000090L	CN type
	0C5060000000110L	AU type
VESA MOUNTING KIT *	0ZMM650000000400	Hole pattern: 100 mm x 100 mm & 75 mm x 75 mm
WI-FI + BT EXPANSION KIT *	0ZHKAWCB161H0001	Wi-Fi 2.4 GHz / 5 GHz + Bluetooth 4.0 Class I kit w/ antennas
WINDOWS 10 OS *	0ZW498E000030000	Win 10 IoT 2016 LTSB ENG x64 High End Kit (Core i7-6600U / i7-7600U)
(depending on model)	0ZW498E000040000	Win 10 IoT 2016 LTSB ENG x64 Value Kit (others)

(*: Optional)

► PRODUCT CONTACT POINT

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