

KBox F-420-WLU

BIG PERFORMANCE IN A SMALL BOX



MINI BOX PC WITH 8TH GEN INTEL® CORE™ / CELERON® U-SERIES PROCESSORS

- ▶ 1x DP++, 1x HDMI 2.0 for display output
- ▶ 1x GbE LAN for Ethernet
- ▶ 4x USB 3.1, 1x RS232/422/485 for peripherals
- ▶ 1x M.2 Key B, 1x M.2 Key E, 1x M.2 Key M for SSD storage & wireless expansion
- ▶ Palm-sized compact volume

KBox F-420-WLU

MINI BOX PC WITH 8TH GENERATION INTEL® CORE™ / CELERON® U-SERIES PROCESSORS

KBox F-420-WLU is a box PC enclosed within a palm-sized aluminum chassis. It can easily fit into any space environment. Powered by 8th Generation Intel® Core™ / Celeron® U-Series processors, it delivers excellent processing and graphics performance to applications requiring intense data throughput, especially for video / image data.

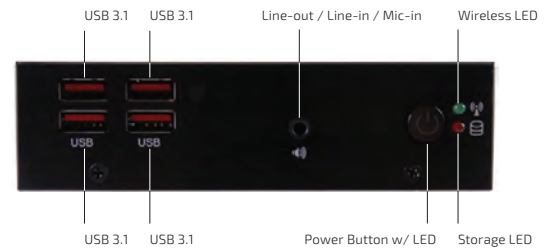
Besides most demanding I/O ports, including one GbE LAN, one DP++, one HDMI 2.0, four USB 3.1 and one RS232/422/485, KBox F-420-WLU integrates three next-generation M.2 expansion sockets, allowing users to expand storage media and wireless connection without sacrificing small form factor.

PRODUCT HIGHLIGHTS

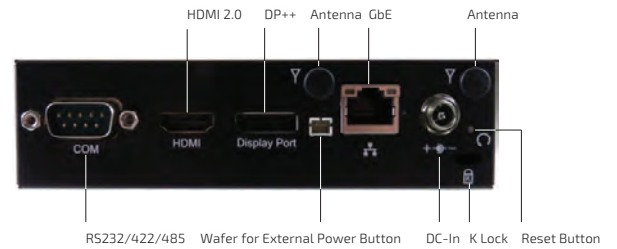
- ▶ 8th Gen Intel® Core™ / Celeron® U-Series Processors (up to 25 W TDP)
- ▶ 2x DDR4 SO-DIMM memory socket
- ▶ 1x DP++, 1x HDMI 2.0 for display output
- ▶ 1x GbE LAN for Ethernet
- ▶ 4x USB 3.1 for USB device connection
- ▶ 1x RS232/422/485 for serial device connection
- ▶ 1x M.2 Key B for SSD / WWAN expansion
- ▶ 1x M.2 Key E for WLAN / Bluetooth expansion (CNVi support)
- ▶ 1x M.2 Key M for SSD storage
- ▶ 0.5-liter palm-sized volume

MECHANICAL DIMENSIONS

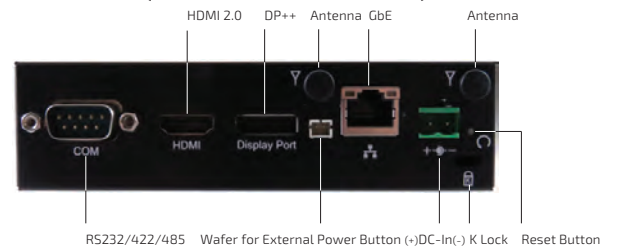
Front I/O Panel



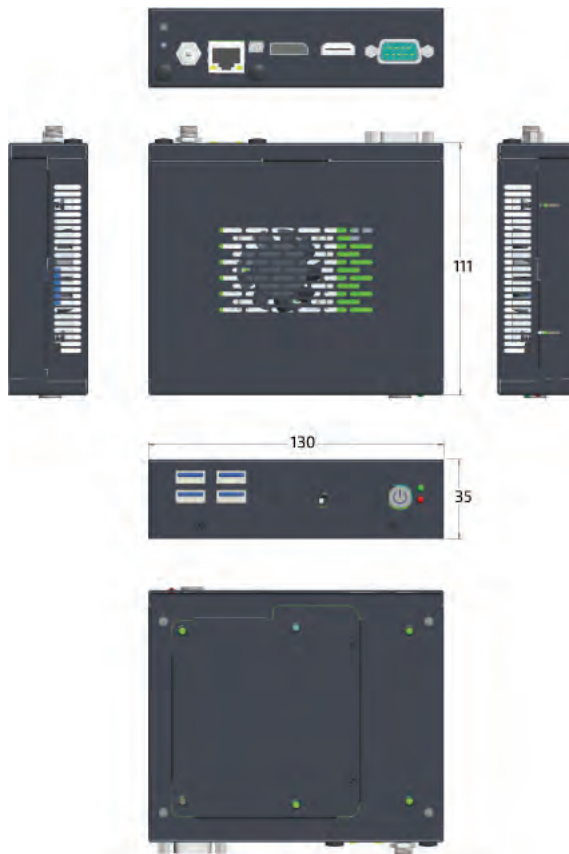
Rear I/O Panel (Model with DC Jack)



Rear I/O Panel (Model with Phoenix Connector)



Model with DC Jack



Model with Phoenix Connector



unit: mm

► TECHNICAL INFORMATION

SYSTEM	PROCESSOR	Intel® Core™ i7-8665UE (Quad Core, 8M Cache, up to 4.4 GHz, FCBGA1528, 15 W TDP) Intel® Core™ i5-8365UE (Quad Core, 6M Cache, up to 4.1 GHz, FCBGA1528, 15 W TDP) Intel® Core™ i3-8145UE (Dual Core, 4M Cache, up to 3.9 GHz, FCBGA1528, 15 W TDP) Intel® Celeron® 4305UE (Dual Core, 2M Cache, 2.0 GHz, FCBGA1528, 15 W TDP) 2x DDR4 2400 1.2 V SO-DIMM up to 64 GByte (Core™ i model) 2x DDR4 2133 1.2 V SO-DIMM up to 64 GByte (Celeron® model)
VIDEO	GRAPHICS DISPLAY INTERFACE MULTIPLE DISPLAY	Intel® UHD Graphics 620 (Core™ i models) Intel® UHD Graphics 610 (Celeron® models) 1x DP++ (on rear, 4096 x 2304 @ 60 Hz) 1x HDMI 2.0 (on rear, 4096 x 2160 @ 60 Hz) Dual
AUDIO	AUDIO CODEC AUDIO INTERFACE	Realtek ALC662 1x Line-out / Line-in / Mic-in (on front)
NETWORK CONNECTION	ETHERNET	1x GbE LAN (RJ45 on rear, Intel® I219)
PERIPHERAL CONNECTION	USB SERIAL PORT	4x USB 3.1 (Type A on front) 1x RS232/422/485 (DB9 on rear)
STORAGE & EXPANSION		1x M.2 Key B (Type 2242 / 2280 / 3042, w/ SATA / PCIe x1 / USB 3.1) 1x M.2 Key E (Type 2230 / 3030, w/ PCIe x1 / USB 2.0, CNVi support) 1x M.2 Key M (Type 2280, w/ PCIe x4 / SATA) 1x SIM Cage (Micro type, connected to M.2 Key B)
POWER	INPUT VOLTAGE & CONNECTOR POWER ADAPTER	DC 12 V (Lockable DC jack on rear, configuration 1) DC 19 V ~ 24 V (Phoenix connector on rear, configuration 2) AC 100 V ~ 240 V to DC 12 V 60 W (supplied accessory for configuration 1) AC 100 V ~ 240 V to DC 24 V 60 W (optional accessory for configuration 2)
FIRMWARE	BIOS WATCHDOG H/W MONITOR REAL TIME CLOCK vPRO TPM	AMI uEFI BIOS w/ 256 Mb SPI Flash Programmable WDT to generate system reset event Input & Core Voltages, CPU & System Temperatures Processor integrated RTC Supported for Core™ i7 / i5 model Optional (Infineon SLB 9665 TPM 2.0)
SYSTEM CONTROL & MONITORING	BUTTON, SWITCH & INDICATOR	1x Power Button w/ LED (on front) 1x External Power Button (on rear) 1x Reset Button (on rear) 1x Storage LED (on front) 1x Wireless LED (on front)
COOLING	FAN	1x CPU Smart Fan
SOFTWARE	OS SUPPORT	Windows 10, Linux
MECHANICAL	CONSTRUCTION DIMENSIONS (W x D x H) WEIGHT MOUNTING SECURITY	Aluminum Chassis 130 mm x 111 mm x 35 mm / 5.12" x 4.37" x 1.38" TBD VESA Mount 1x Kensington Lock
ENVIRONMENTAL	OPERATION TEMPERATURE STORAGE TEMPERATURE HUMIDITY	0 °C ~ 50 °C / 32 °F ~ 122 °F -20 °C ~ 80 °C / -4 °F ~ 176 °F 0 % ~ 90 %
CERTIFICATION	EMC & SAFETY	CE, FCC Class B

► ORDERING INFORMATION

ARTICLE	DESCRIPTION
KBox F-420-WLU-i7-8665UE	Intel® Core™ i7-8665UE, DC 19 V ~ 24 V Phoenix connector, w/o power adapter
KBox F-420-WLU-i5-8365UE	Intel® Core™ i5-8365UE, DC 19 V ~ 24 V Phoenix connector, w/o power adapter
KBox F-420-WLU-i3-8145UE	Intel® Core™ i3-8145UE, DC 19 V ~ 24 V Phoenix connector, w/o power adapter
KBox F-420-WLU-4305UE	Intel® Celeron® 4305UE, DC 19 V ~ 24 V Phoenix connector, w/o power adapter
KBox F-420-WLU-i7-8665UE-12V	Intel® Core™ i7-8665UE, DC 12 V jack, w/ power adapter
KBox F-420-WLU-i5-8365UE-12V	Intel® Core™ i5-8365UE, DC 12 V jack, w/ power adapter
KBox F-420-WLU-i3-8145UE-12V	Intel® Core™ i3-8145UE, DC 12 V jack, w/ power adapter
KBox F-420-WLU-4305UE-12V	Intel® Celeron® 4305UE, DC 12 V jack, w/ power adapter

OPTIONAL ACCESSORIES

POWER ADAPTER	AC 100 V ~ 240 V to DC 24 V 60 W with open wire, for model w/ Phoenix connector
VESA MOUNT KIT	