# KBox A-330-RPI





# Compact Industrial Box PC based on Raspberry Pi for the Top Hat Rail – For Control & Gateway Applications

- ► Based on BROADCOM BCM2837B0 Quad Core Arm® A53 processor / Raspberry Pi Module CM3+
- Supported by huge community based open source software pool
- ► Fanless compact design for DIN rail, ideal for control cabinet applications
- ► Industrial grade, 8+ years availability



# KBox A-330-RPI

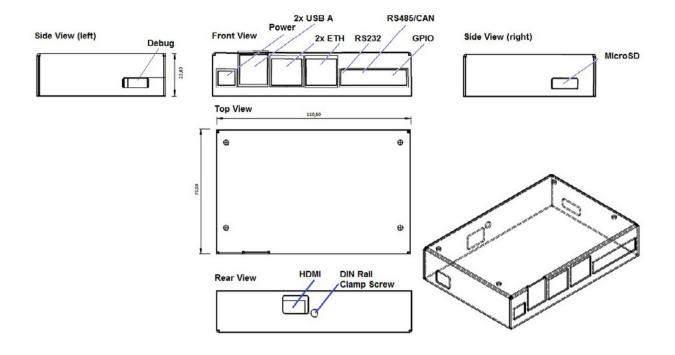
Based on the BROADCOM BCM2837B0 Quad Core Arm® A53 processor/Raspberry Pi Compute Module CM3+ the Kontron KBox A-330-RPI was developed as a compact industrial grade Box PC for the top hat rail, ideal for cost sensitive control and gateway applications.

The KBox A-330-RPI is supported by a huge software pool offered by the Raspberry Pi Community. Furthermore the Box PC is industrial grade and thanks to its fanless and compact design perfectly suited for control cabinet applications. The system offers numerous interfaces allowing for the connection of various communication layers. RS232/RS485 serial interfaces and the CAN bus expansion are provided for local data collection or linking up to the sensor- or machine environment.

# ► TECHNICAL INFORMATION

PROCESSOR  PLATFORM CONTROLLER HUB  MEMORY  TECHNOLOGY CAPACITY  GRAPHICS  GRAPHICS GRAPHICS ENGINE  USB ETHERNET SERIAL PORTS OTHERS  MICROSD Card or internal eMMC (8, 32 GByte, others on project request)  SOFTWARE SUPPORT  MECHANICAL  CONSTRUCTION COULING DIMENSIONS (HxWxD) WEIGHT MOUNTING  ENVIRONMENT  OPERATING TEMPERATURE RELATIVE HUMIDITY OPERATING SHOCK ALTITUDE  POWER SUPPLY  APPROVALS  CERTIFICATIONS  CE  REAR I/O  BROADCOM BCM283780 Quad Core Arm® A53  Integrated Integr			
MEMORY  TECHNOLOGY CAPACITY  GRAPHICS  GRAPHICS ENGINE  VideoCore IV OpenGL-ES 1.1/2.0, Full HD 250MHz  FRONT I/O  USB ETHERNET SERIAL PORTS 2x BEST 21 x RS2485 or CAN 4x Digital IOS  REAR I/O  GRAPHICS PORTS  Micro HDMI  STORAGE  INTERNAL DRIVES  MicroSD Card or internal eMMC (8, 32 GByte, others on project request)  SOFTWARE SUPPORT  LINUX  Raspbian  MECHANICAL  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT Approx. 0,26 kg for mounting on 35mm mounting rail acc. to EN 60715  ENVIRONMENT  OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING VIBRATION OPERATING SHOCK ALTITUDE  POWER SUPPLY  INPUT VOLTAGE RANGE  2x USB 2.0 (1x configurable to 0TG) 2x Fast Ethernet 1x RS232, 1x RS485 or CAN 4x Digital IoS 2x GByte, others on project request)  NicroSD Card or internal eMMC (8, 32 GByte, others on project request)  Stainless steel Fanless for mounting on 35mm mounting rail acc. to EN 60715  OPERATING TEMPERATURE 20°C to +55°C (32°F to 131°F) -20°C to +80°C (-4°F to 176°F) -2	PROCESSOR	CPU	BROADCOM BCM2837B0 Quad Core Arm® A53
GRAPHICS GRAPHICS ENGINE VideoCore IV OpenGL-ES 1.1/2.0, Full HD 250MHz  FRONT I/O  USB ETHERNET SERIAL PORTS OTHERS  REAR I/O  GRAPHICS PORTS Micro HDMI  STORAGE INTERNAL DRIVES MicroSD Card or internal eMMC (8, 32 GByte, others on project request)  SOFTWARE SUPPORT LINUX Raspbian  MECHANICAL  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  ENVIRONMENT  OPERATING TEMPERATURE RELATIVE HUMIDITY OPERATING SHRATION OPERATING SHRATION OPERATING SHRATION OPERATING SHRATION OPERATING SHRATION OPERATING SHOCK ALTITUDE  INPUT VOLTAGE RANGE  2x USB 2.0 (1x configurable to OTG) 2x Fast Ethernet 1x FS232, 1x RS485 or CAN 4x Digital Ivo 1x FS485	PLATFORM CONTROLLER HUB	SYSTEM CHIPSET	Integrated
FRONT I/O  USB ETHERNET SERIAL PORTS OTHERS  OTHERS  REAR I/O  GRAPHICS PORTS  Micro HDMI  STORAGE  INTERNAL DRIVES  MicroSD Card or internal eMMC (8, 32 GByte, others on project request)  MicroSD Card or internal eMMC (8, 32 GByte, others on project request)  SOFTWARE SUPPORT  LINUX  Raspbian  MECHANICAL  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  ENVIRONMENT  DEPRATING TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK ALTITUDE  POWER SUPPLY  INPUT VOLTAGE RANGE  2x USB 2.0 (1x configurable to OTG) 2x Fast Ethernet 1x RS232, 1x RS485 or CAN 4x Digital IOS  Micro HDMI 2x Fast Ethernet 1x RS232, 1x RS485 or CAN 4x Digital IOS  Micro HDMI 2x Fast Ethernet 1x RS232, 1x RS485 or CAN 4x Digital IOS  Micro HDMI  Stainless steel Fanless 111 x 25 x 76 mm Approx. 0.26 kg for mounting on 35mm mounting rail acc. to EN 60715  0°C to +55°C (32°F to 131°F) -20°C to +80°C (-4°F to 176°F) 93% @ 40°C, non-condensing 5-500 Hz, IC acc. IEC 60068-2-6 half sine, 15 g, 11 ms acc. IEC 60068-2-27 5000 m (16400 ft)  POWER SUPPLY  INPUT VOLTAGE RANGE  24 V DC (932V DC), typ. 5W, max 12W (without digital IO)	MEMORY		-:
ETHERNET SERIAL PORTS OTHERS  REAR I/O  GRAPHICS PORTS OTHERS  Micro HDMI  STORAGE  INTERNAL DRIVES  Micro D Card or internal eMMC (8, 32 GByte, others on project request)  SOFTWARE SUPPORT  LINUX  Raspbian  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  ENVIRONMENT  OPERATING TEMPERATURE STORAGE TEMPERATURE STORAGE TEMPERATURE STORAGE TEMPERATURE OPERATING VIBRATION OPERATING SHOCK ALTITUDE  O C to +55 °C (32 °F to 131 °F) -20 °C to +80 °C (-4 °F to 176 °F) 93% e 4 °C, non-condensing 93% e 4 °C, non-condensing OPERATING SHOCK ALTITUDE  POWER SUPPLY  INPUT VOLTAGE RANGE  2x Fast Ethernet 1x RS232, 1x RS485 or CAN 4x Digital IOs  Stainless steel Fanless 111 x 25 x 76 mm Approx. 0,26 kg for mounting on 35mm mounting rail acc. to EN 60715  O C to +55 °C (32 °F to 131 °F) -20 °C to +80 °C (-4 °F to 176 °F) 93% e 4 °C, non-condensing OPERATING SHOCK ALTITUDE  POWER SUPPLY  INPUT VOLTAGE RANGE  24 V DC (932V DC), typ. 5W, max 12W (without digital IO)	GRAPHICS	GRAPHICS ENGINE	VideoCore IV OpenGL-ES 1.1/2.0, Full HD 250MHz
STORAGE  INTERNAL DRIVES  MicroSD Card or internal eMMC (8, 32 GByte, others on project request)  LINUX  Raspbian  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT Approx. 0,26 kg MOUNTING  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT Approx. 0,26 kg For mounting on 35mm mounting rail acc. to EN 60715  ENVIRONMENT  OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING VIBRATION OPERATING SHOCK ALTITUDE  O °C to +55 °C (32 °F to 131 °F) -20 °C to +56 °C (32 °F to 176 °F) 93% @ 40 °C, non-condensing 5-500 Hz, 1G acc. IEC 60068-2-6 half sine, 15 g, 11 ms acc. IEC 60068-2-27 5000 m (16400 ft)  POWER SUPPLY  INPUT VOLTAGE RANGE  24 V DC (932V DC), typ. 5W, max 12W (without digital IO)	FRONT I/O	ETHERNET SERIAL PORTS	2x Fast Ethernet 1x RS232, 1x RS485 or CAN
SOFTWARE SUPPORT  MECHANICAL  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  CONSTRUCTION Stainless steel Fanless Fanless For mounting on 35mm mounting rail acc. to EN 60715  ENVIRONMENT  OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING VIBRATION OPERATING SHOCK ALTITUDE  O°C to +55°C (32°F to 131°F) -20°C to +80°C (-4°F to 176°F) 93% @ 40°C, non-condensing 5-500 Hz, 1G acc. IEC 60068-2-6 half sine, 15 g, 11 ms acc. IEC 60068-2-27 5000 m (16400 ft)  POWER SUPPLY  INPUT VOLTAGE RANGE  24 V DC (932V DC), typ. 5W, max 12W (without digital IO)	REAR I/O	GRAPHICS PORTS	Micro HDMI
MECHANICAL  CONSTRUCTION COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK ALTITUDE  CONSTRUCTION Fanless Fanless 111 x 25 x76 mm Approx. 0,26 kg for mounting on 35mm mounting rail acc. to EN 60715  O°C to +55 °C (32 °F to 131 °F) -20 °C to +80 °C (-4 °F to 176 °F) 93% @ 40 °C, non-condensing 5-500 Hz, 1G acc. IEC 60068-2-6 half sine, 15 g, 11 ms acc. IEC 60068-2-27 5000 m (16400 ft)  POWER SUPPLY  INPUT VOLTAGE RANGE  24 V DC (932V DC), typ. 5W, max 12W (without digital IO)	STORAGE	INTERNAL DRIVES	MicroSD Card or internal eMMC (8, 32 GByte, others on project request)
COOLING DIMENSIONS (HxWxD) WEIGHT MOUNTING  OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK ALTITUDE  Fanless  111 x 25 x 76 mm Approx. 0,26 kg Approx. 0,26 k	SOFTWARE SUPPORT	LINUX	Raspbian
STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK ALTITUDE  STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK ALTITUDE  -20 °C to +80 °C (-4 °F to 176 °F) 93% @ 40 °C, non-condensing 5-500 Hz, 1G acc. IEC 60068-2-6 half sine, 15 g, 11 ms acc. IEC 60068-2-27 5000 m (16400 ft)  POWER SUPPLY  INPUT VOLTAGE RANGE  24 V DC (932V DC), typ. 5W, max 12W (without digital IO)	MECHANICAL	COOLING DIMENSIONS (HxWxD) WEIGHT	Fanless 111 x 25 x76 mm Approx. 0,26 kg
	ENVIRONMENT	STORAGE TEMPERATURE RELATIVE HUMIDITY OPERATING VIBRATION OPERATING SHOCK	-20 °C to +80 °C (-4 °F to 176 °F) 93% @ 40 °C, non-condensing 5-500 Hz, 1G acc. IEC 60068-2-6 half sine, 15 g, 11 ms acc. IEC 60068-2-27
APPROVALS CERTIFICATIONS CE	POWER SUPPLY	INPUT VOLTAGE RANGE	24 V DC (932V DC), typ. 5W, max 12W (without digital IO)
	APPROVALS	CERTIFICATIONS	CE

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#### **▶** ORDERING INFORMATION

ARTICLE	PART NO.	DESCRIPTION
KBOX A-330 RASPBERRY PI	KBox A-330-RPI	Raspberry Pi CM3+ lite based: 1 G RAM, no eMMC, SD card slot, 2x USB 2.0, 2x Fast Ethernet, RS232, CAN or RS485, 4x Dig-IO, uHDMI, DIN rail housing
	KBox A-330-RPI-8	Raspberry Pi CM3+ lite based: 1 G RAM, 8 GByte eMMC, SD card slot, 2x USB 2.0, 2x Fast Ethernet, RS232, CAN or RS485, 4x Dig-IO, uHDMI, DIN rail housing
	KBox A-330-RPI-32	Raspberry Pi CM3+ lite based: 1 G RAM, 32 GByte eMMC, SD card slot, 2x USB 2.0, 2x Fast Ethernet, RS232, CAN or RS485, 4x Dig-IO, uHDMI, DIN rail housing

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