

# KBox C-104-RPL-x

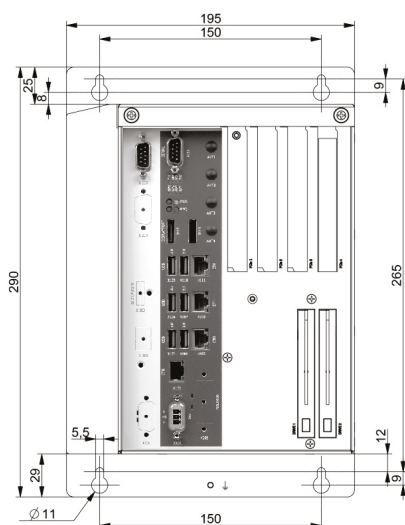


## Powerful High-End Industrial Computer Platform for Control Cabinet Applications

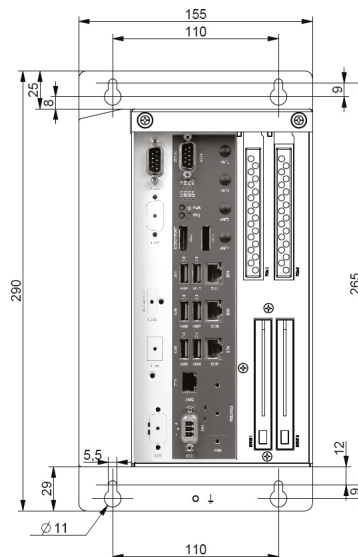
- Based on 13th Gen Intel® Core™ processors with hybrid architecture
- Outmost flexibility by PCIe, M.2 and mPCIe expansion options
- Highest system availability: Fanless system design, Goldcap and redundant PSU option
- Optimized for control applications with Fieldbus and NVRAM option, Intel® TCC and TSN

|                                                                                    | KBox C-104-RPL-4                                                                                                                                                                                                                                                                                                                                                                                                                                  | KBox C-104-RPL-2                                                                                                                                                                        | KBox C-104-RPL-1                                                                                                                                                                          | KBox C-104-RPL-0                                                                                                                                                                          |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROCESSORS                                                                         | 13th Generation Intel® processors via COM Express® type 6 modules:<br>- Core™ i7-13800HRE: 14x 2.5 GHz, 24 MByte cache, Intel® TCC and TSN<br>- Core™ i7-13800HE: 14x 2.5 GHz, 24 MByte cache<br>- Core™ i5-13600HRE: 12x 2.7 GHz, 18 MByte cache, Intel® TCC and TSN<br>- Core™ i5-13600HE: 12x 2.7 GHz, 18 MByte cache<br>- Core™ i3-13300HRE: 8x 2.1 GHz, 12 MByte cache, Intel® TCC and TSN<br>- Core™ i3-13300HE: 8x 2.1 GHz, 12 MByte cache |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| MEMORY                                                                             | Up to 64 GByte DDR5 5600 RAM, 2x SODIMM sockets                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| NON-VOLATILE RAM (NVRAM)                                                           | 1 MByte MRAM, available on project request                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| INTERFACES                                                                         | 4x 2.5 GbE with TSN support, WOL<br>3x USB 3.2, 3x USB 2.0<br>2x DisplayPort<br>1x COM port RS232/RS422/RS485<br>8x LED incl. 4x GPIO LED<br>2x Buttons: Power & Reset                                                                                                                                                                                                                                                                            |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| OPTIONAL INTERFACES                                                                | CAN module for layer 2 CAN, on project request<br>2nd COM port RS232/RS422/RS485<br>3rd DisplayPort<br>2nd 24 VDC power input, hot standby functionality<br>Profibus, Profinet or Ethercat Fieldbus<br>Options for WI-FI, 4G/LTE or 5G                                                                                                                                                                                                            |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| STORAGE DRIVES                                                                     | 1x M.2 2280 M-Key and<br>1x M.2 2280 B-Key,<br>2x 2.5" SATA SSD/HDD<br>internal, optional<br>accessible via removable<br>drive assemblies                                                                                                                                                                                                                                                                                                         | 1x M.2 2280 M-Key and<br>1x M.2 2280 B-Key,<br>2x 2.5" SATA SSD/HDD<br>internal, optional<br>accessible via removable<br>drive assemblies                                               | 1x M.2 2280 M-Key and<br>1x M.2 2280 B-Key,<br>1x 2.5" SATA SSD/HDD<br>internal, optional<br>accessible via removable<br>drive assembly                                                   | 1x M.2 2280 M-Key and<br>1x M.2 2280 B-Key,<br>1x 2.5" SATA SSD/HDD<br>internal                                                                                                           |
| EXPANSIONS                                                                         | 2x PCIe x4 + 2x PCIe x1,<br>1x M.2 3052 B-Key for<br>LTE/5G expansion w.<br>SIM card socket<br>1x mPCIe for Fieldbus<br>NVRAM or WI-FI<br>expansion                                                                                                                                                                                                                                                                                               | 2x PCIe x4 or<br>1x PCIe x4 + 1x PCI,<br>1x M.2 3052 B-Key for<br>LTE/5G expansion w.<br>SIM card socket<br>1x mPCIe for Fieldbus<br>NVRAM or WI-FI<br>expansion                        | 1x PCIe x4,<br>1x M.2 3052 B-Key for<br>LTE/5G expansion w.<br>SIM card socket<br>1x mPCIe for Fieldbus<br>NVRAM or WI-FI<br>expansion                                                    | 1x M.2 3052 B-Key for<br>LTE/5G expansion w.<br>SIM card socket<br>1x mPCIe for Fieldbus<br>NVRAM or WI-FI<br>expansion                                                                   |
| POWER SUPPLY                                                                       | 24 VDC (17-36 VDC), up to 20 ms hold-up                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| DIMENSION (H X W X D)                                                              | With Mounting brackets<br>for Control Cabinet<br>Mounting<br>290 x 195 x 210 mm<br>(11.42" x 7.68" x 8.27")<br><br>w/o Mounting Brackets<br>236 x 195 x 210 mm<br>(9.29" x 7.68" x 8.27")                                                                                                                                                                                                                                                         | With Mounting brackets<br>for Control Cabinet<br>Mounting<br>290 x 155 x 210 mm<br>(11.42" x 6.1" x 8.27")<br><br>w/o Mounting Brackets<br>236 x 155 x 210 mm<br>(9.29" x 6.1" x 8.27") | With Mounting brackets<br>for Control Cabinet<br>Mounting<br>290 x 130 x 210 mm<br>(11.42" x 5.12" x 8.27")<br><br>w/o Mounting Brackets<br>236 x 130 x 210 mm<br>(9.29" x 5.12" x 8.27") | With Mounting brackets<br>for Control Cabinet<br>Mounting<br>290 x 117 x 210 mm<br>(11.42" x 4.61" x 8.27")<br><br>w/o Mounting Brackets<br>236 x 117 x 210 mm<br>(9.29" x 4.61" x 8.27") |
| MOUNTING                                                                           | Control cabinet key holes, book size format<br>Sidewall mounting optional                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| COOLING                                                                            | Fanless, optional with fan                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| ENVIRONMENTAL<br>OPERATING TEMPERATURE<br>STORAGE TEMPERATURE<br>CLIMATIC HUMIDITY | tbc<br>-40 °C to +75 °C (-40 °F to 167 °F)<br>93 % RH at 40 °C, non-condensing (acc. to IEC 60068-2-78)                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| APPROVALS                                                                          | CE, CB, UL, FCC                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| SOFTWARE SUPPORT                                                                   | Windows® 11 IOT LTSC 2024, Linux Debian                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| SECURITY FEATURES                                                                  | TPM 2.0 controller                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                         |                                                                                                                                                                                           |                                                                                                                                                                                           |
| WEIGHT                                                                             | 6 kg (13.22 lbs.)                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.75 kg (10.47 lbs.)                                                                                                                                                                    | 4.6 kg (10.14 lbs.)                                                                                                                                                                       | 3.8 kg (8.37 lbs.)                                                                                                                                                                        |

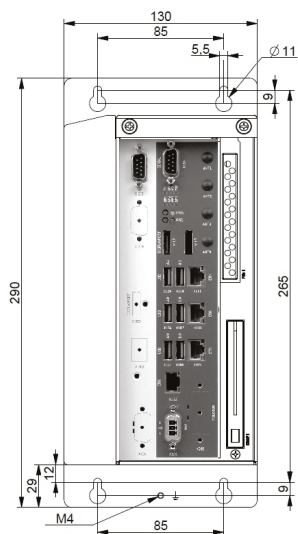
KBox C-104-RPL-4



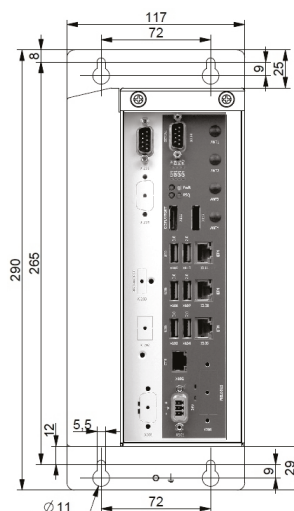
KBox C-104-RPL-2



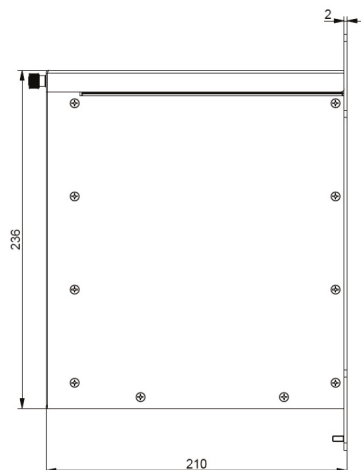
KBox C-104-RPL-1



KBox C-104-RPL-0



Right Side



## Global Headquarters

**Kontron Europe GmbH**

Gutenbergstraße 2  
85737 Ismaning, Germany  
Tel.: + 49 821 4086-0  
info@kontron.com

[www.kontron.com](http://www.kontron.com)

