

# KBox C-102-x

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## HIGH-END INDUSTRIAL COMPUTER PLATFORM FOR CONTROL CABINET APPLICATIONS

- ▶ Based on 6th Gen Intel® Core™ or XEON® E3-1500 for demanding control applications
- ▶ Modular approach – forever young
- ▶ Wartungsfrei (maintenance-free)
- ▶ Security Solution Kontron APPROTECT based on WIBU Systems Technology



AN S&T COMPANY

Developed specifically for industrial applications and tasks such as control, visualization, and inspection in the production process in particular, the new KBox C-102 series features a maintenance-free design without any fans or batteries. This ensures a significantly prolonged lifespan and high system availability. The KBox C-102 series' modular structure based on the standardized COM Express® technology results in highly scaleable systems and ensures simple upgrades whenever needed.

The availability of different housing options guarantees mounting even when space is limited.

The KBox C-102 series is based on the high-performance Intel® 6th Gen Core™ or Intel® XEON® E3 processors. With its broad range of interfaces, various storage capabilities and expansion slots, the KBox C-102 series maximizes flexibility and eases adaptation to the specific application needs.

## ▶ TECHNICAL INFORMATION

|                                | KBox C-102-4  | KBox C-102-2   | KBox C-102-1   | KBox C-102-0   |
|--------------------------------|---|--|--|--|
| <b>PROCESSORS</b>              | 6th Generation Intel® processor via COM Express® type 6:<br>- Xeon® E3-1515M: Quad-Core 2.8 GHz, 8 MByte cache<br>- Core™ i7-6820EQ: Quad-Core 2.8 GHz, 8 MByte cache<br>- Core™ i5-6442EQ: Quad-Core 1.9 GHz, 6 MByte cache<br>- Core™ i3-6102E: Dual-Core 1.9 GHz, 3 MByte cache<br>- Celeron® G3902E: Dual-Core 1.6 GHz, 2 MByte cache |  |  |  |
| <b>PLATFORM CONTROLLER HUB</b> | Intel® CM236 or QM170 (Core™ i5 & Core™ i7)   |  |  |  |
| <b>MEMORY</b>                  | Up to 32 GByte DDR4 RAM, non-ECC/ECC  |  |  |  |
| <b>RTC</b>                     | High-precision RTC with gold-cap backup   |  |  |  |
| <b>SECURITY FEATURES</b>       | TPM 2.0 controller and Kontron APPROTECT  |  |  |  |
| <b>INTERFACES</b>              | 3x 10/100/1000 MBit/s Ethernet with IEEE1588 support<br>2x USB 3.0, 2x USB 2.0<br>1x DisplayPort<br>1x RS232<br>8x LEDs (Thermal, Drive, SD, Watchdog, 4x General Purpose)<br>2x Buttons Power/Reset & Rescue   |  |  |  |
| <b>STORAGE DRIVES</b>          | 2x mSATA (internal),<br>1x SDCard (removable),<br>2x 2.5" SATA SSD/HDD<br>internal, optional<br>accessible via removable<br>drive assemblies  | 2x mSATA (internal),<br>1x SDCard (removable),<br>2x 2.5" SATA SSD/HDD<br>internal, optional<br>accessible via removable<br>drive assemblies | 2x mSATA (internal),<br>1x SDCard (removable),<br>1x 2.5" SATA SSD/HDD<br>internal, optional<br>accessible via removable<br>drive assembly | 2x mSATA (internal),<br>1x SDCard (removable),<br>1x 2.5" SATA SSD/HDD<br>internal |
| <b>EXPANSIONS</b>              | 2x PCIe x4 + 2x PCIe x1,<br>2x mPCIe (1x for Fieldbus<br>expansion)   | 2x PCIe x4,<br>2x mPCIe (1x for Fieldbus<br>expansion)   | 1x PCIe x4,<br>2x mPCIe (1x for Fieldbus<br>expansion)   | 2x mPCIe (1x for Fieldbus<br>expansion)  |
| <b>POWER SUPPLY</b>            | 24 VDC (+20 %/-15 %), 10ms hold-up  |  |  |  |
| <b>DIMENSION (H X W X D)</b>   | 290 x 195 x 210 mm<br>(11.42" x 7.68" x 8.27")  | 290 x 155 x 210 mm<br>(11.42" x 6.1" x 8.27")  | 290 x 130 x 210 mm<br>(11.42" x 5.12" x 8.27")   | 290 x 117 x 210 mm<br>(11.42" x 4.61" x 8.27")                                     |
| <b>MOUNTING</b>                | Control cabinet key holes, book size format   |  |  |  |
| <b>COOLING</b>                 | Fan less  |  |  |  |
| <b>ENVIRONMENTAL</b>           |   |  |  |  |
| <b>OPERATING TEMPERATURE</b>   | with Intel® Core™ i3/i5: 0 °C to + 65 °C (32 °F to 149 °F)<br>with Intel® Core™ i7/XEON®: 0 °C to + 50 °C (32 °F to 122 °F)   |  |  |  |
| <b>STORAGE TEMPERATURE</b>     | -40 °C to +85 °C (-40 °F to 185 °F)   |  |  |  |
| <b>CLIMATIC HUMIDITY</b>       | 93 % RH at 40 °C, non-condensing (acc. to IEC 60068-2-78)   |  |  |  |
| <b>APPROVALS</b>               | CE, CB, UL, FCC   |  |  |  |
| <b>SOFTWARE SUPPORT</b>        | Windows® 7, Windows® Embedded Standard 7, Windows® 10, Linux®   |  |  |  |
| <b>WEIGHT</b>                  | 6 kg (13.22 lbs.)   | 4.75 kg (10.47 lbs.)   | 4.6 kg (10.14 lbs.)  | 3.8 kg (8.37 lbs.)   |

## ▶ GLOBAL HEADQUARTERS

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