

# Product datasheet

Specifications



## Modular box PC, Harmony iPC, HMIBM Universal HDD DC Windows 10 2 slots

HMIBMUHI29D2801

### Main

|                                       |   |
|---------------------------------------|---|
| Range of product                      | Harmony iPC   |
| Product or component type             | Modular box PC  |
| Device short name                     | Modular BOX PC Universal  |
| Range compatibility                   | Modular Display HMIDM<br>IDisplay   |
| Accessory / separate part destination | PC panel on HMIDM modular display   |
| Processor name                        | Intel Celeron 2980U 1.6 GHz   |
| Chipset type                          | Intel QM87  |
| Video controller type                 | Intel HD Graphics   |
| Operating system                      | Windows 10 IoT Enterprise 64 bit (switched from Windows 8.1 in Q1 2018)multi-language   |
| Software package                      | Node-RED and system nodes restore IIoT Wiring Operating System Restore<br>McAfee white listing installer cyber security license not included<br>EcoStruxure secure connect advisor annual subscription cyber security license not included<br>EcoStruxure Operator Terminal Expert run time HMI license not included<br>EcoStruxure machine SCADA expert run time HMI/SCADA on configured offer only<br>EcoStruxure augmented operator advisor server augmented operator license not included |

### Complementary

|   |   |
|---|---|
| Mounting location                       | Book mounting<br>Flat mounting<br>Wall mounting   |
| Data storage equipment                  | 500 GB enterprise hard disk   |
| Memory description                      | 4 GB RAM DDR3 internal (not expandable)<br>512 kB MRAM internal   |
| Free slots                              | 2 Internal SATA HDD/SSD with slide-in HMIYMADSD1 to mount . hot swap RAID with Intel Rapid Storage Technology<br>1 CFast<br>1 mSATA                   |
| Number of slots                         | 2 slot(s) for mini PCI Express full-size  |
| Number of slots available for expansion | 2 slot(s) for mini PCIe   |
| Display resolution                      | 3200 x 2000 pixels at 60 Hz   |
| Watchdog timer                          | 1...255 ms  |
| Type of cooling                         | Fanless<br>Fan required to mount PCI/PCIe cards above 3 W   |
| Electrical connection                   | Screw connector, connector type: pin, 1 way, circuit application: ground - location: bottom<br>Connector, connector type: SMA, 3 ways - location: top |

|                                   |   |
|-----------------------------------|---|
| <b>Integrated connection type</b> | Display port with 1 on bottom<br>Display port with 1 on front<br>Ethernet with 2 RJ45 I210, transmission rate: 10/100/1000 Mbps on bottom IEEE 1588 supported<br>COM1 serial link for battery backup with 1 male SUB-D 9 RS232/422/485 on bottom<br>USB 2.0 port with 2 USB type A, transmission rate: 480 Mbit/s on bottom<br>USB 3.0 port with 2 USB type A, transmission rate: 5 Gbit/s on bottom<br>TPM connector Ver 1.2 for cyber security - hardware encryption TPM module HMIYMINATPM201 to be installed/default installed on motherboard |
| <b>[Us] rated supply voltage</b>  | 24 V DC power supply<br>100...240 V AC power supply   |
| <b>Supply voltage limits</b>      | 18...36 V   |
| <b>Inrush current</b>             | 8.9 A   |
| <b>Power consumption in W</b>     | 35.0 W (box)<br>39.0 W (with 4:3 12" display HMIDM6421)<br>37.0 W (with Wide 12" display HMIDM6521)<br>40 W (with 4:3 15" display HMIDM7421)<br>41 W (with Wide 15" display HMIDM7521)<br>43 W (with Wide 19" display HMIDM9521)<br>45 W (with Wide 22" display HMIDMA521)  |
| <b>Control type</b>               | ON/OFF button   |
| <b>Main type</b>                  | Universal   |
| <b>Depth</b>                      | 65.2 mm   |
| <b>Height</b>                     | 207 mm  |
| <b>Width</b>                      | 254 mm  |
| <b>Product weight</b>             | 3.1 kg  |

## Environment

|  |   |
|--|---|
| <b>Standards</b>                             | Class A group 1 EN 55011<br>EN 61000-6-4<br>EN 61131-2<br>FCC part 15<br>UL 61010   |
| <b>Product certifications</b>                | CE<br>CULus<br>CULus CSA 22-2 No 142<br>CULus HazLoc Class I Division 2 ANSI/ISA 12-12-01<br>CULus HazLoc Class I Division 2 CSA 22-2 No 213<br>ATEX<br>CCC<br>RCM<br>EAC<br>IEC Ex hazardous locations 3GD zone 2/22   |
| <b>Quality labels</b>                        | CE  |
| <b>Directives</b>                            | 2006/95/EC - low voltage directive<br>2004/108/EC - electromagnetic compatibility   |
| <b>IP degree of protection</b>               | IP40 conforming to IEC 60529  |
| <b>Electromagnetic compatibility</b>         | Immunity to high frequency interference conforming to IEC 61000-4<br>Disturbing field emission class A conforming to EN 55011<br>Conducted and radiated emissions class A conforming to EN 55022  |
| <b>Ambient air temperature for storage</b>   | -30...70 °C conforming to IEC 60068-2-2<br>-30...70 °C conforming to IEC 60068-2-14   |
| <b>Relative humidity</b>                     | 10...95 % non-condensing conforming to EN/IEC 60068-2-30  |
| <b>Ambient air temperature for operation</b> | 0...55 °C (by default) conforming to EN/IEC 60068-2-2<br>0...50 °C flat mounting<br>0...45 °C on PCI/PCIe HMIDM modular display with HDD<br>0...40 °C flat mounting on HDD<br>0...40 °C flat mounting on mini PCIe<br>0...40 °C flat mounting on PCI/PCIe<br>0...45 °C conforming to 2 on mini PCIe HMIDM modular display |
| <b>Operating altitude</b>                    | 2000 m conforming to IEC 60664-1  |
| <b>Vibration resistance</b>                  | 2 gn (f = 5...500 Hz) SSD or CFast<br>1 gn (f = 5...500 Hz) HDD   |

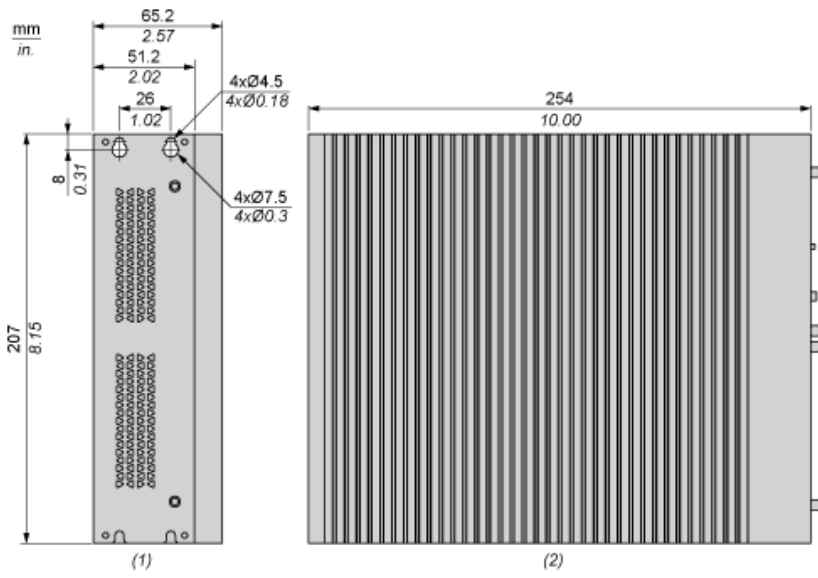
## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 25.15 cm |
| Package 1 Width              | 44.45 cm |
| Package 1 Length             | 47.75 cm |
| Package 1 Weight             | 5.45 kg  |
| Unit Type of Package 2       | CAR      |
| Number of Units in Package 2 | 1        |
| Package 2 Height             | 45 cm    |
| Package 2 Width              | 24.5 cm  |
| Package 2 Length             | 43 cm    |
| Package 2 Weight             | 5.2 kg   |
| Unit Type of Package 3       | P12      |
| Number of Units in Package 3 | 2        |
| Package 3 Height             | 45 cm    |
| Package 3 Width              | 80 cm    |
| Package 3 Length             | 120 cm   |
| Package 3 Weight             | 48 kg    |

## Offer Sustainability

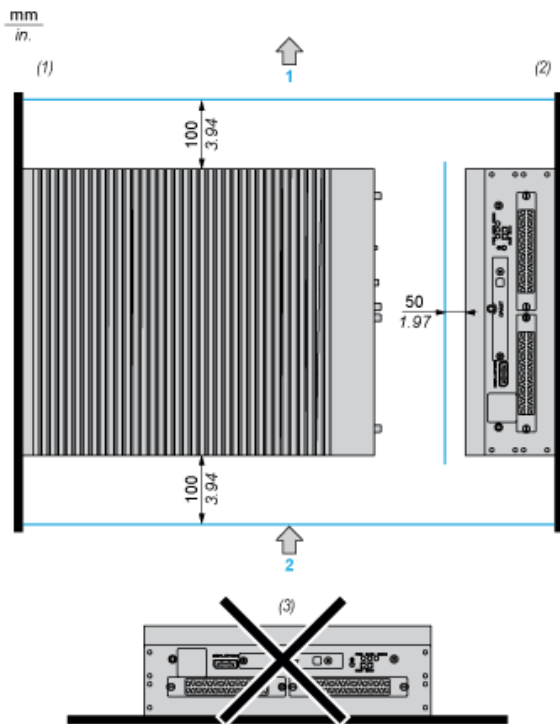
|                            |   |
|----------------------------|---|
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                           |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>  |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Dimensions



- (1) Rear view
- (2) Left view

Spacing Requirements



- 1 : Air out
- 2 : Air in
- (1) Book mounting : Vertical mounting with rear fixing
- (2) Wall mounting : Vertical mounting with side fixing
- (3) Horizontal mounting

Recommended replacement(s)