

# IBDRW100-EX-P

Intel® Atom® E3950 ATEX Rugged Box PC (C1D2 Certified)



## KEY FEATURES

- Class 1, Division 2 device certified for hazardous area application
- DIN Rail design for Industrial Automation applications
- Onboard Intel® Atom® Processor E3950 1.6 GHz, up to 2.0 GHz
- 1 x RS232 / 422 / 485 communication, select thru BIOS
- 4 x Giga LAN, 3 x USB 3.0, 1 x USB 2.0, 1 x VGA, 1 x Line out, 1 x line in, 1 x Mic in, 1 x Power Jack
- Fanless, streamlined enclosure for highly efficient heat Dissipation
- 40°C~70°C wide operation temperature range
- AWS IoT Greengrass Certified, ATEX rugged box pc

## INTRODUCTION

Winmate DIN Rail ATEX Box PC Series is a robust and reliable computing solution designed for hazardous industrial environments. Certified for Class 1, Division 2, and ATEX Zone 2, it ensures safe operation in hazardous areas while delivering high performance with Intel processors. Built with a fanless design for efficient heat dissipation, it withstands wide temperature ranges and challenging conditions. Ideal for industrial automation, remote data collection, and process control, this rugged box PC is a versatile choice for demanding applications.

## SPECIFICATIONS

### System Specification

<b>WLAN</b>	Support (Optional)	<b>BT</b>	Support (Optional)
<b>Expansion Port</b>	1 x M.2 2230 E-key (for Wi-Fi) 1 x M.2 2242 B-key Slot (for SSD)	<b>Processor</b>	Intel Atom E3950 1.6GHz (up to 2GHz) Intel Atom E3940 1.6GHz (up to 1.8GHz) Intel Atom E3930 1.3GHz (up to 1.8GHz)
<b>Memory</b>	1 x SO-DIMM, DDR3L 1866 MHz, 4GB 8GB (Optional)	<b>Storage</b>	1 x M.2 2242 B-key SSD 128GB 256GB (Optional) 512GB (Optional) 1 x SATA III for 2.5" SSD/HDD (Optional)
<b>Ethernet controller</b>	4 x Intel® Ethernet Controller	<b>Security</b>	TPM 2.0
<b>Operating System</b>	Windows 10 IoT Enterprise (64 bit) (Optional) Linux Ubuntu 20.04 (Optional)		

### Mechanical

<b>Dimension</b>	139 x 65.4 x 152 mm	<b>Weight</b>	1.5 kg
<b>Mounting</b>	Din-Rail mounting	<b>Enclosure</b>	Aluminum Housing
<b>Cooling System</b>	Fanless Design		

### Environment

<b>Operating Humidity</b>	10% to 90% RH, Non-Condensing	<b>Operating Temperature</b>	-40°C to 70°C
<b>Storage Temperature</b>	-40°C to 80°C	<b>Shock</b>	MIL-STD-810G Method 516.6 Procedure I (Optional)

Vibration MIL-STD-810G Method 514.6 Procedure I

## Certification

Certification	CE, FCC, IC
	UL 62368-1 CSA C22.2 No. 62368-1-14 EN 62368-1
	Class I, Div.2, Groups A,B,C,D T4(T5) -40 <= Tamb <= 70 Meet Standards CAN/CSA C22.2 NO. 213-17 UL 121201 Ed.9

## IO Ports

Power Input	1 x Isolated 9~36V DC with 3-Pin Terminal Block	USB Port	3 x USB3.2 Gen1x1 (Type-A) 1 x USB2.0 (Type-A)
Serial Port	1 x RS232/422/485 DB9 connector (Default RS232) 1 x Isolated RS422/485 DB9 connector (Default RS422)	Video	1 x VGA DB15 connector
Audio	Mic in Line in Line out	Expansion Port	1 x M.2 2242 B-key Slot (for SATA III SSD) 1 x M.2 2230 E-key (for Wi-Fi module)
LAN	4 x Giga LAN RJ45 Connector	Indicator	1 x LED Indicator for power 1 x LED Indicator for storage
DIDO	1 x Isolated 5V 9-in/9-out DIO with 20-Pin Terminal block 1 x Isolated 30V 9-in/8-out DIO with 20-Pin Terminal block (Optional) 1 x Isolated 30V 10-in/7-out DIO with 20-Pin Terminal block (Optional) 1 x Isolated 30V 11-in/6-out DIO with 20-Pin Terminal block (Optional) 1 x Isolated 30V 12-in/5-out DIO with 20-Pin Terminal block (Optional)		

## Control

Button	1 x Reset Button
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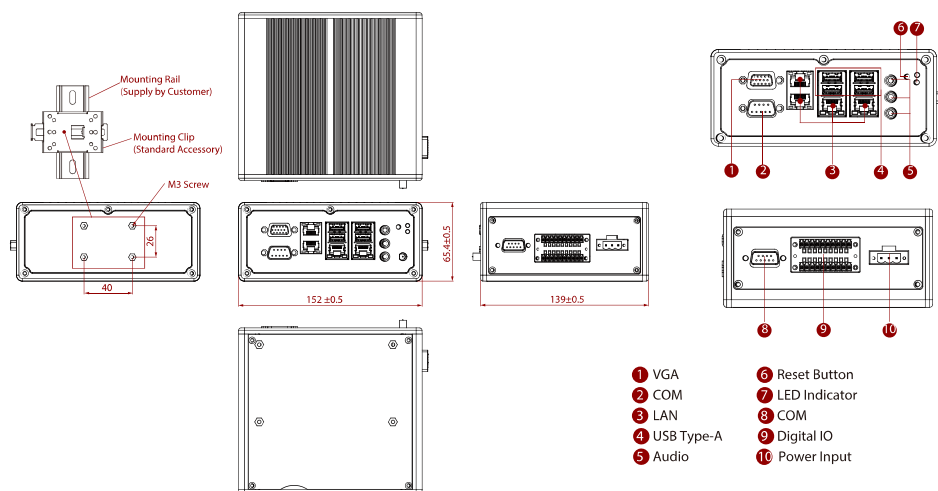
## Accessory

Accessory	1 x 100~240V AC to DC Adapter 1 x Power Cord 2 x Terminal Block 10 pin fconnector for DIDO 1 x Open Wire Cable 1 x Terminal Block 3 pin to 2.5Ø Female Adapter Cable 1 x Din Rail Mounting kits 1 x Cable Holder kits
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## Power

Power Rating	9V to 36V DC with isolation, 3-Pin Terminal Block	Adapter	12V 84W
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## DIMENSIONS UNIT:MM



## NOTE

1. Total usable memory will be less dependent upon actual system configuration.
2. Length measurements do not include protrusions. Weight varies with options.
3. Measured at maximum backlight and high CPU load.
4. Accessories and integrated options may vary depending on your configuration
5. This is a simplified drawing and some components are not marked in detail.
6. All specifications are subject to change without prior notice.
7. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.