

Hotel Edge Host

Datasheet



MGH-SA512G-BP.10



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Before using this product, please read this datasheet carefully and keep it properly!

Document Version: C

◆◆ Overview

Hotel Edge Host (Model: MGH-SA512G-BP.10, hereinafter referred to as "this product" or "this device") is a host device compatible with the Ubuntu / Kylin SP1 operating system. It must be used in conjunction with an RCU Lite or a second-generation hotel host. This device is equipped with the built-in IHMS Edge system and can be configured via HDL Studio, enabling functions such as monitoring and control of guest room devices, as well as hotel service management.

Key Functions:

- **Room Management:** Real-time room status monitoring, single-unit control, batch control, etc.
- **Device Management:** Management of all hotel devices, status viewing, unbinding, and other functions.
- **Energy Consumption Management:** View the hotel's overall power consumption, average power consumption, energy consumption trends, etc. (Energy module configuration required).
- **Account Center:** View account information corresponding to the login account, view and download the hotel's current guest control QR codes.
- **System Settings:** Department management, role management, employee account management, etc., supporting differentiated permissions for different users.
- **Service Management:** Service type management, guest room service viewing & processing, service history records, etc.
- **Message Center:** System global messages, with voice broadcast of messages sorted by priority.
- **PMS Binding:** Integration and binding with the hotel PMS system; realizes energy-saving operation of air conditioners and scene automation according to room status changes.

◆◆ Appearance

No.	Interface	Qty	Function
1	PWR/RUN/ALM	3	Power/Run/Alarm Indicator
2	HDMI	1	HDMI
3	USB	2	Dual-layer USB 3.0+USB 3.0
4	LAN1	1	Power / Run / Auto-negotiation 10/100/1000 Mbps Ethernet
5	LAN2	1	Power / Run / Auto-negotiation 10/100/1000 Mbps Ethernet
6	RS232, RS485	4	Isolated RS232 ports × 2 Isolated RS485 ports × 2
7	CAN	2	CAN port
8	DI, DO	2	Digital input, Digital output
9	Power	1	Input Power: 12 ~ 24V DC
10	RST	1	Reset button
11	DEBUG	1	Type-C debugging interface

12	SD	1	TF card slot
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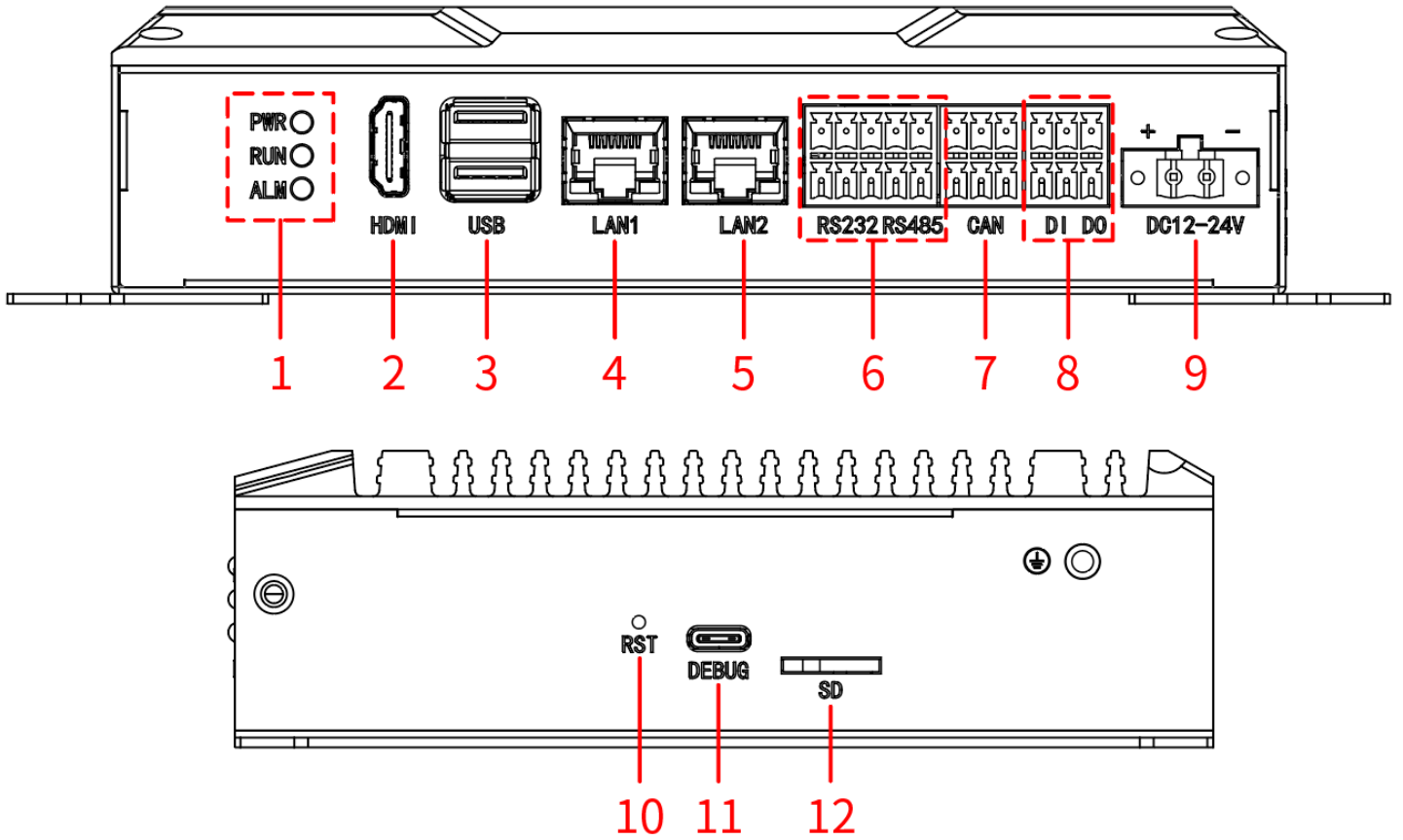


Figure 1

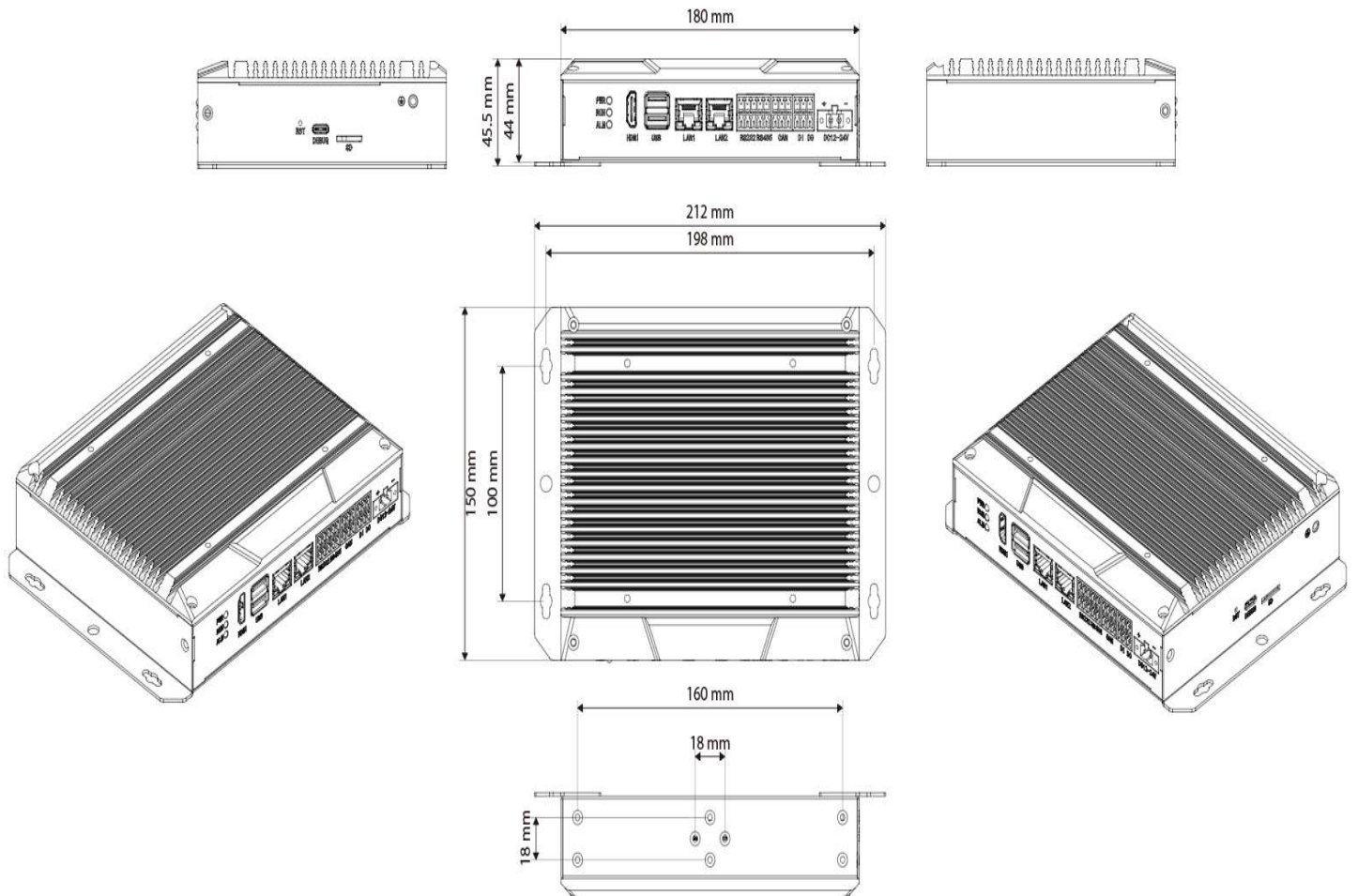
◆◆ Technical Data

Processor	SoC	RockChip RK3588
	CPU	Quad-core Cortex-A76 and quad-core Cortex-A55 processor
RAM	Capacity	16GB (LPDDR4X) , supports up to 32GB (optional)
Storage Capacity	System Storage	128GB eMMC (Onboard, non-removable)
	Data Storage	512GB mSTAT SSD (Replaceable)
	TF card	Supports a TF card slot (For TF card expansion)
Display	MIPI DSI	Supports 4K@60fps output
	HDMI	Supports 7680x4320@60Hz output
	eDP	Supports 4K@60fps output
Internet	Ethernet	10/100/1000Mbps ports × 2
I/O Port	USB Port	USB3.0 Type A × 2, Type C × 1 (Debug serial port)
	COM	Isolated RS232 ports × 2 Isolated RS485 ports × 2
	CAN	CAN bus × 2
	RESET	RESET button × 1
	DI/DO	DI × 2, DO × 2

Software Support	Linux	Android 12、Ubuntu 18.04 、ubuntu20.04
Power	Input Voltage	12 ~ 24V DC
Technical Data	Surface Treatment	Aluminum alloy housing
	Installation	DIN rail /wall mounting
	Dimensions (W × H × D)	45.5 × 150 × 212mm
Environmental Specifications	Working Temperature	0 ~ 60°C
	Storage Temperature	-20 ~ 70°C
	Relative Humidity	≤90%RH, non-condensed
	Vibration Resistance	With SSD: 36 rms, IEC 60068-2-64, random, 5–500 Hz, 1 hour/axis (wall-mounted)
	Shock Resistance	With SSD: 30 G, IEC-60068-2-27, half-sine, 11 ms duration (wall-mounted)

◆◆ Specifications

External Dimensions	Dimensions	159mm × 105.6mm × 50mm (Without bottom cover) 185mm × 105.6mm × 50mm (With bottom cover)
Installation		Wall-mounted, DIN rail, VESA
EMC		Not lower than EMC Class 2



◆◆ Safety Precaution

DANGER:

Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.

WARNING:

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. (hereinafter referred to as HDL) or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this datasheet.
- Please contact HDL after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to the warranty.

CAUTION:

- Before performing any installation or disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.
- Do not use corrosive liquid to wipe the device body, especially the interface, so to avoid damage to the device. Do not wipe the device with a damp cloth.
- Before performing any maintenance or cleaning procedures on the device, it is imperative to disconnect the device from all voltage sources. This precautionary measure is necessary in order to prevent electric leakage and the risk of electric shock.
- Buspro cable: CAT5E or HDL Buspro cable.
- For Buspro connection, a hand-in-hand connection is recommended.
- After all of the cables are terminated, check for correct and good terminations.

◆◆ Wiring

DI/DO Connector Pin Definition:

PIN	Signal Name
1	DO1
2	DI1
3	DO2
4	DI2

5	GND_COM1
6	GND_G

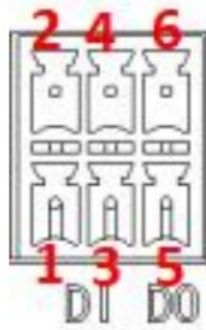


Figure 3

CAN Connector Pin Definition:

PIN	Signal Name
1	CAN0_L
2	CAN1_L
3	CAN0_H
4	CAN1_H
5	GND
6	GND

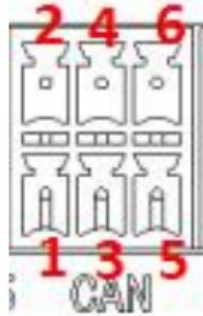


Figure 4

RS232+RS485 Connector Pin Definition:

PIN	Signal Name
1	RS232_RX_0
2	RS232_RX_1
3	RS232_TX_0
4	RS232_TX_1
5	GND
6	GND
7	RS485_A_2
8	RS485_A_3

9	RS485_B_2
10	RS485_B_3

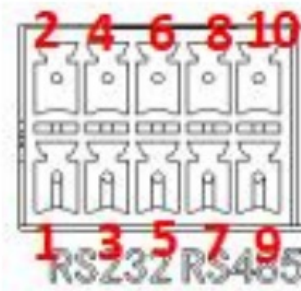


Figure 5

◆◆ Installation

Step 1. Place one end of the bottom cover of the hotel edge host onto the guide rail, and move the hotel edge host until it is properly positioned. Align the holes on the bottom cover with the holes on the guide rail, then secure it with cable ties or screws.

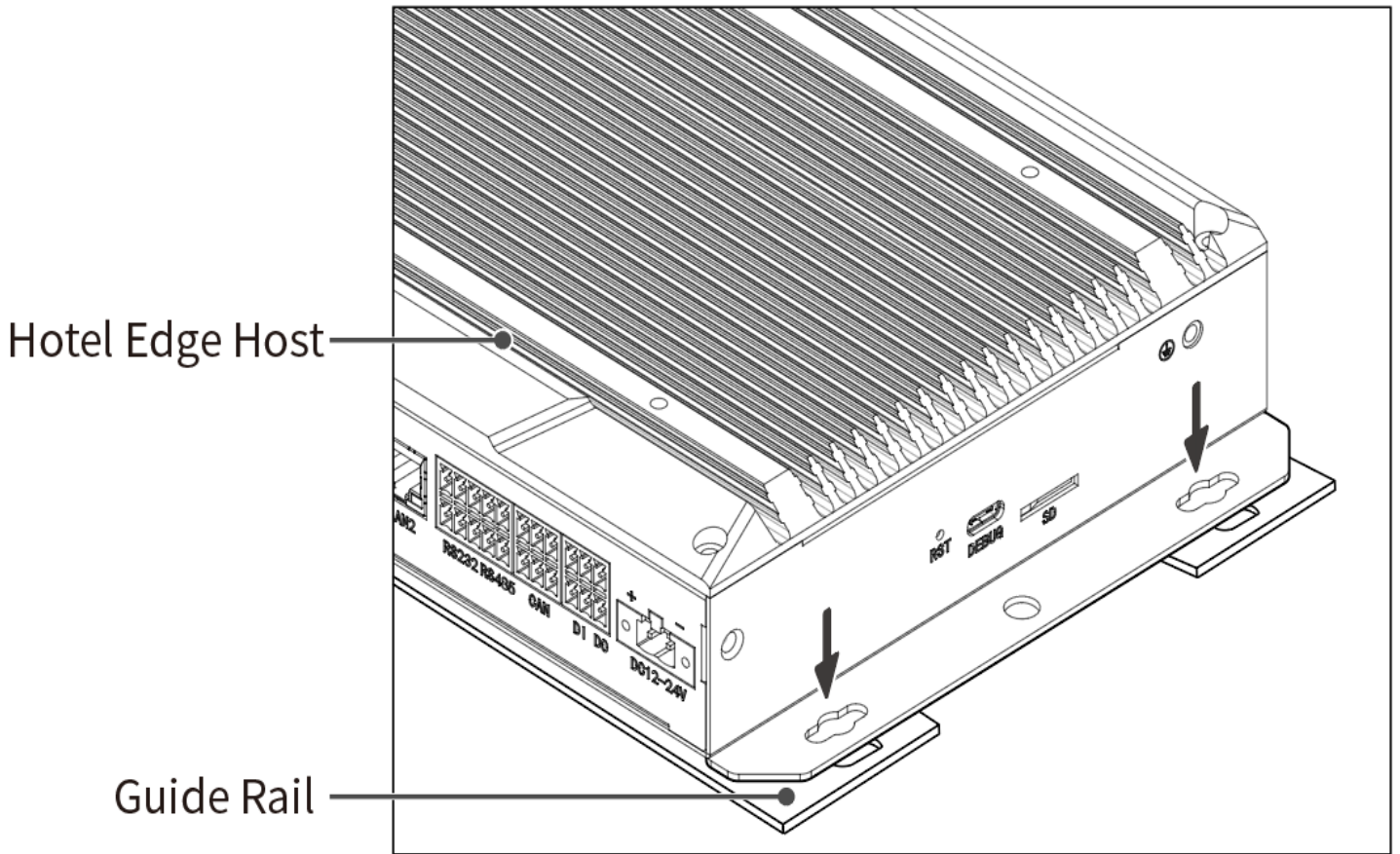


Figure 6

Step 2. Repeat Step 1 for the other end.

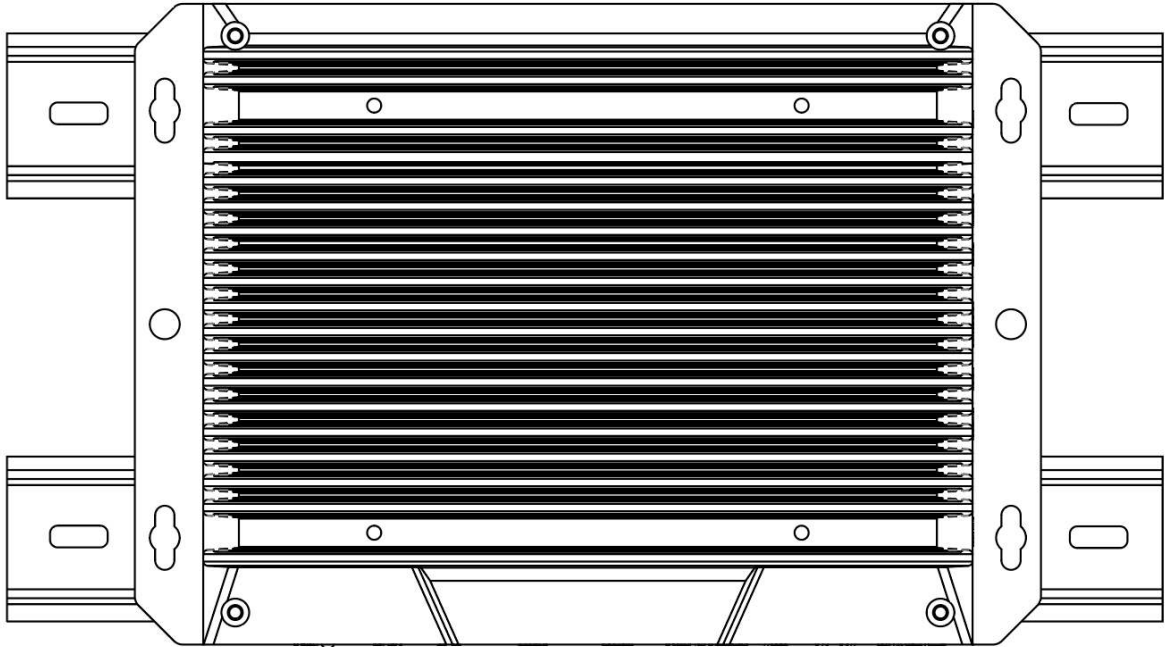


Figure 7

◆◆ Packing List

- Hotel Edge Host × 1
- Power adapter × 1
- 3P terminal block × 2
- 5P terminal block × 1

Note: After unpacking, please check if the product and the parts are complete.

◆◆ Warranty

Warranty period (three years from the date of invoice), if the product fails in normal use, the user can go to the nearest authorized institution with a valid warranty card to obtain free maintenance.

In the following cases, HDL regards the user as giving up the relevant services promised under the warranty and the user shall bear the corresponding responsibility and shall not be entitled to the free warranty:

- Failure of the device caused by force majeure factors.
- The user has placed the device in a transportation or use environment that does not comply with the statements in the product instructions or technical manuals.
- Unauthorized disassembly of the product by the user.
- Promises not made officially by HDL to the user that are beyond the scope of the warranty are the responsibility of the promisor.

HDL reserves the right to update or change the product without prior notice to the user, please visit the HDL website for

answers to your questions and the latest product information.

The final interpretation right of the warranty regulations belongs to HDL.

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Update History:

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	February 4, 2026
V1.1	Revise the packing list, remove RTC clock details, and update the format and dimension specifications in the product specification table.	March 19, 2026
V1.2	Remove the bracket installation content and update the packing list.	March 24, 2026

◆◆ Technical Support

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