



Edge R1100 provides flexible IoT wireless communication(4G, LoRa®, Wi-Fi/BLE, Zigbee) and essential functional modules (GPS, UPS, TPM2.0, PoE, SSD, etc.).



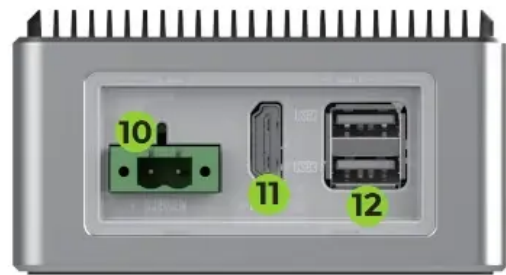
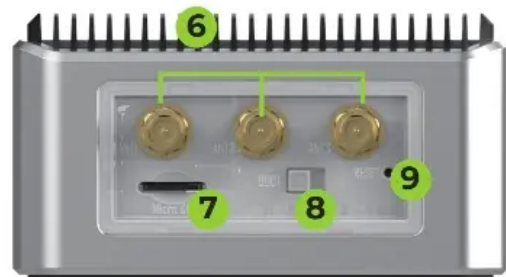
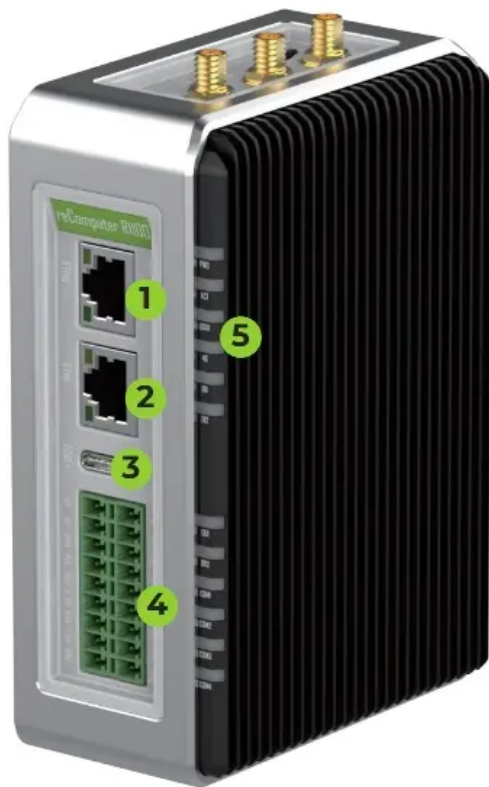
Specification

Parameter	Description	
Hardware Spec		
Product Series	R1100 Series	
CPU	Raspberry Pi CM4, Quad-core Cortex-A72@ 1.5GHz	
Operating System	Raspbian, Debian, Yocto, Buildroot	
RAM	1GB/2GB/4GB/8GB	
eMMC	16GB	
System Spec		
Power Input	DC 9V~36V, 2-pin Terminal Block	
PoE(as powered device)	IEEE 802.3af Standard 12.95W PoE*	

Power Consumption	Idle:2.88W; Full Load:5.52W	
Power Switch	No	
Reboot Switch	Yes	
Interface		
Ethernet	1 x 10/100/1000 Mbps (Supports PoE*)	
	1 x 10/100 Mbps IEEE802.3/802.3u	
USB	2 x USB-A 2.0 Host	
	1 x USB-C 2.0 (For flashing OS)	
RS485	2x RS485(Isolated)	
RS232	2x RS232(Isolated)	
DI	2 x Isolated DI Ports	
	Input Voltage: 5~24V DC	
DO	2 x Isolated DO Ports	
	Output Voltage: <60V DC	
HDMI	1 x HDMI 2.0	
SIM Card	1x Nano SIM Card Slot (Internal)	
SD Card	1x Micro SD Card Slot	
SSD Card	1x M.2 NVMe SSD Slot 2280-M Key	
LED	12 x LED Indicators	
Buzzer	1	
Reset Button	1	
Wireless Communication		
Wi-Fi 2.4/5.0 GHz	On-chip Wi-Fi	
BLE 5.0	On-chip BLE	
LoRa®*	USB LoRa®*/SPI LoRa®*	
4G Cellular*	4G LTE*	
Zigbee*	Zigbee* Module	
Standards		

EMC	ESD: EN61000-4-2, Level 3	
	EFT: EN61000-4-4, Level 2	
	Surge: EN61000-4-5, Level 2	
Certification	CE	
	FCC	
	TELEC	
	RoHS	
Ambient Conditions		
Ingress Protection	IP40	
Operating Temperature	-30~70 °C	
Operating Humidity	10~95% RH	
Storage Temperature	-40~80 °C	
Others		
Supercapacitor UPS*	SuperCAP UPS LTC3350 Module*	
Hardware Watch Dog	1~255s	
RTC	High Accuracy RTC	
Security	Encryption Chip TPM 2.0*/ATECC608A	
Heat Dissipation	Fanless	
Warranty	2 years	
Production Lifetime	Until December 2030	
Statement	Options marked with * require additional purchase according to the accessories list.	

Hardware Overview



- ① 1000M Ethernet
- ② 100M Ethernet
- ③ Serial Console
- ④ 2x Isolated RS485,
2x Isolated RS232,
2x Isolated DI,
2x Isolated DO

- ⑤ LED
- ⑥ 3 x Reserved Antenna
Ports for Wireless
- ⑦ Micro SD Card Slot
- ⑧ Boot Switch
- ⑨ Reset Hole

- ⑩ Power In
- ⑪ HDMI
- ⑫ USB Host