seeed studio

INDUSTRIAL PRODUCT DATASHEET

reComputer R Series & Optional Accessories I Raspberry Pi CM4 Customization & Engineering

reComputer R Series: A Raspberry Pi CM4-based edge gateway with optional accessories for industrial IoT, smart building, and AI-driven applications.

SKU	UPDATED
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Overview



The reComputer R Series is a customizable edge gateway built on Raspberry Pi Compute Module 4, offering optional accessories such as 4G/LTE modules, LoRaWAN gateways, SSDs, TPM 2.0, UPS, and various antennas for flexible industrial deployment. It supports applications including intelligent supermarket systems, IIoT data management with MING Stack, and smart building control via FIN Framework.

Key Features

Note:

Price Increase Announcement
Date: March 2, 2026
Due to increased demand for modules and SSDs, reComputer' pricing is expected to rise by approximately $20–$80 in the coming weeks. Please confirm your orders and requirements accordingly to help secure availability.

- reComputer R1000 Assembly Guide
  - **Disassembly Guide**
  - **Assemble SSD**
  - **Assemble Wi-Fi/BLE Antenna**
  - **Install LTE and GNSS Antenna**
  - **Assemble 4G/LoRa®/Zigbee Module and Antenna**
  - **Assemble TPM 2.0 Module**
  - **Assemble UPS and PoE Module**
- Mounting Guide
  - **DIN-rail Mounting Guide**
  - **Wall Mounting Guide**
- **Accessory List**

WM1302 LoRaWAN Gateway Module based on Semtech SX1302 - US915 - Seeed Studio

114993268

WM1302 LoRaWAN Gateway Module Without SX1262(USB) - US915 - Seeed Studio

114992628

LoRa Antenna Kit for reTerminal DM - 868-915 MHz - Seeed Studio

Wi-Fi/BLE Antenna

Raspberry Pi Compute Module 4 Antenna Kit - Seeed Studio

4G Module

LTECat4EC25-AFXGA-mini-PCIe - 2G/3G/4G communication, built-in multiple GNSS - Seeed Studio

113991135

LTE Cat 4 EC25-AUXGR-mini-PCIe

113991214

LTECat4EC25-EMGA-mini-PCIe

113991296

4G Antenna Kit for reTerminal DM - Seeed Studio

GPS Antenna

GPS Antenna Kit for reTerminal DM - Seeed Studio

UPS Supercapacitor

SuperCAP-UPS-LTC3350-Module-p-5934-Seeed-Studio

Encryption chip TPM 2.0

TPM2.0ModulewithinfineonSLB9670 - SPI interface, Compatible with reComputer Industrial/reServer Industrial featuring Nvidia jetson module - Seeed Studio

SSD Card

NVMe M.2 2280 SSD 1TB-Seeed Studio

112990247

256GB NVMe M.2 PCIe Gen3x4 2280 Internal SSD - Seeed Studio

112990226

MQ7813T120 PoE Module Kit for reTerminal DM - Seeed Studio

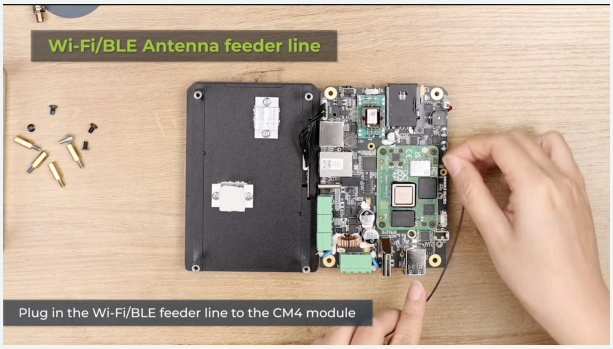
Power Adapter

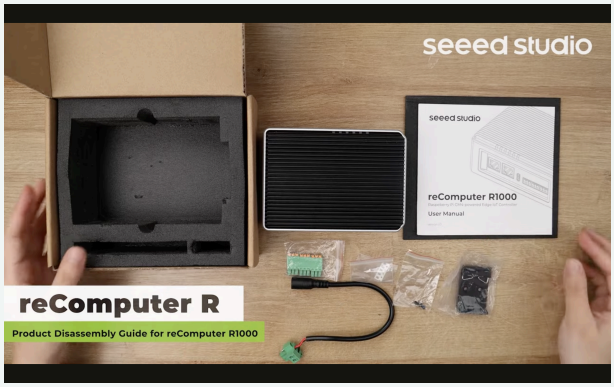
PowerAdapter, 12V/2A/24W, American Standard Plug, DC Output - Seeed Studio

110061506

Product Gallery







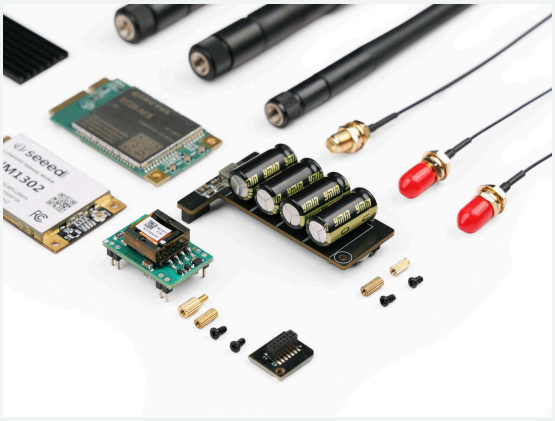












Specification

Parameter	Description	
Hardware Spec		
Product Series	R1100 Series	R1000 Series
CPU	Raspberry Pi CM4, Quad-core Cortex-A72@ 1.5GHz	
Operating System	Raspbian, Debian, Yocto, Buildroot	Raspbian, Debian, Yocto, Buildroot
RAM	1GB/2GB/4GB/8GB	
eMMC	8GB/16GB/32GB	
System Spec		
Power Input	DC 9V~36V, 2-pin Terminal Block	AC12~24V/ DC 9~36V, 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)	3x RS485(Isolated)

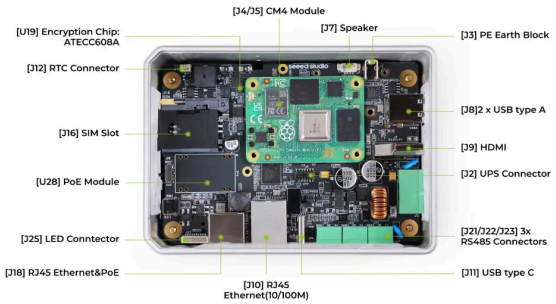
RS232	2x RS232(Isolated)	/
DI	2 x Isolated DI Ports	/
	Input Voltage: 5~24V DC	
DO	2 x Isolated DO Ports	/
	Output Voltage: <60V DC	
HDMI	1 x HDMI 2.0	
SIM Card	1x Nano SIM Card Slot（Internal）	1x Standard SIM card slot
SD Card	1x Micro SD Card Slot	/
SSD Card	1x M.2 NVMe SSD Slot 2280-M Key	
LED	12 x LED Indicators	6 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 2034	
Statement	Options marked with * require additional purchase according to the accessories list.	

Hardware Overview



1	1000M Ethernet	7	SIM Slot
2	100M Ethernet	8	Boot Switch
3	Serial Console	9	Reset Hole
4	3 x Isolated RS485	10	Power In
5	LED	11	HDMI
6	2 x Reserved Antenna Ports for Wireless	12	USB Host

Top View



Bottom View

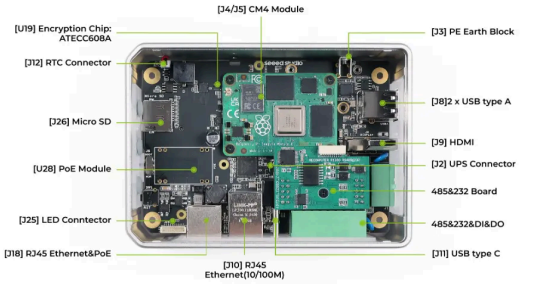




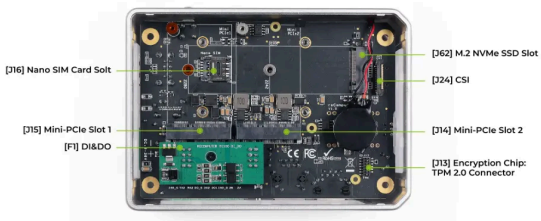
1. 1000M Ethernet
2. 100M Ethernet
3. Serial Console
4. 2x Isolated RS485, 2x Isolated RS232, 2x Isolated DI, 2x Isolated DO
5. LED
6. 3 x Reserved Antenna Ports for Wireless
7. Micro SD Card Slot
8. Boot Switch
9. Reset Hole
10. Power In
11. HDMI
12. USB Host

Mainboard Overview

Top View



Bottom View



Applications

- **Raspberry Pi CM4-Powered Intelligent Supermarket System**
- **Pose-based Light Control System with Node-Red & Raspberry Pi AI Kit**
- **MING Stack for Seamless IIoT Data Management**
- **FIN Framework for Smart Building Management**

Resource Links

- https://www.seeedstudio.com/reComputer-R1000-Series-Optional-Accessories.html
- USER Manual
- reComputer R1000 3D File
- reComputer R1000 Schematic Design, PCB Design
- Seeed's Raspberry Pi Powered Device
- reComputer R1000 Warranty
- reComputer R1000 Flyer (Chinese Version)

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