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USR-EG228

Open CPU Computer

IoT Controller

All- New Featured Industrial Computer Series

Compact in size and widely applicable; Linux Ubuntu22.04; Original Node-RED;

WukongEdge Engine; Diverse I/O and Ethernet interfaces; Powerful CPU chip.







Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Product Features

USR-EG228 is an ARM-based Linux industrial control computer. It is equipped with an industrial-grade RK3506J triple-core Cortex-A7 + Cortex-M0 Processor with a main frequency of 1.2 GHz. It supports various networking methods such as 4G, Wi-Fi, and Ethernet. The device comes with 1×USB, 2×RS485, and 2×CAN FD.

On the firmware side, it comes with standard Ubuntu 22.04, and is equipped with the WukongEdge edge computing engine. With simple configuration, it can complete data collection, edge computing, and cloud reporting. The device is pre-installed with the latest version of Node-Red, with drag-and-drop programming, and business logic can be implemented immediately.

The high-performance CPU, various networking methods and hardware interfaces, along with the carefully designed firmware functions, enable this device to be applied in various industrial sites, quickly achieving data collection, monitoring, and analysis applications.

- Industrial-grade CPU RK3506J, 3-core CortexA7, ARM architecture, with a 1.2GHz main frequency
- Dual networks, either 4G/WiFi can be selected, multiple network options are available, and a built-in router, VPN, and firewall functions are included.
- Rich communication interfaces, 2 RS485 interfaces, 2 CAN interfaces, and 1 USB interface.
- Built-in Node-RED for rapid programming, making development simpler and faster.
- Powerful edge gateway functions, supporting edge collection, edge computing, group reporting, and supporting 1000 real-point collection.
- Rich collection protocols, supporting standard Modbus and various mainstream PLC protocols for collection, and supporting various industry protocol collection.
- Linkage control, supporting multi-point linkage， supporting linkage SMS alerts， and linkage platform alerts.
- Supports Modbus protocol conversion function， better connecting the platform to achieve data communication，and customizing other protocols is also possible.

Product Parameter

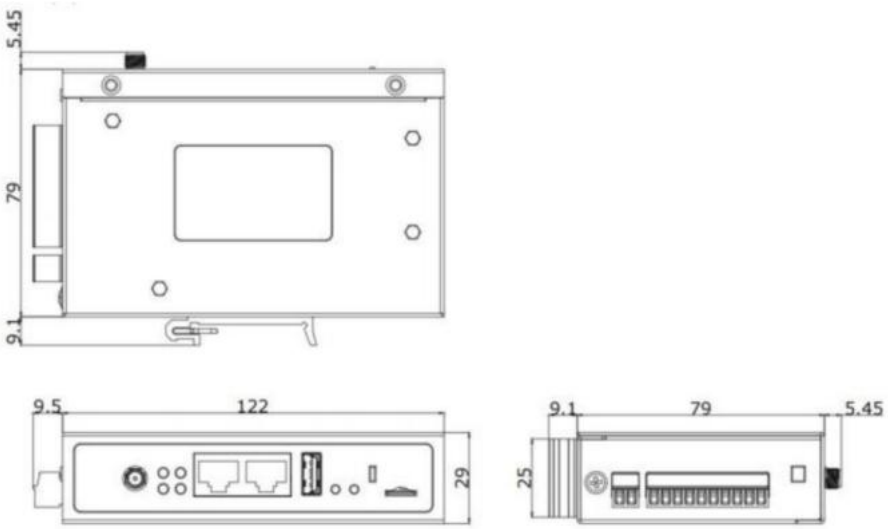
USR-EG228	
CPU	Rockchip RK3506J, triple-core Cortex-A7, main frequency up to 1.2GHz
OS	Linux Ubuntu 22.04 (without desktop)
RAM	DDR3 512MB
ROM	eMMC 8GB
SD Storage	External SD card interface
Network	Ethernet: 2 * 10/100M Ethernet port
	WiFi: 2.4G, IEEE 802.11 b/g/n Frequency: 2.400~2.4835 GHz
	Cellular: LTE Cat 4
SIM	Nano SIM
RTC	Reserved interface for RTC clock battery(Customization function)
USB	1*USB2.0OTG, Type-A, Work as HOST by default
LED	1 * power, red 1 * work, green, flashing after start up 2 * user-defined LED(LED1, LED2)
Key	1 * update key, for updating OS file 1 * user-defined key
Serial	2 * RS485
CAN	2 * CAN FD
Power input	DC 9-36V, 2-pin terminal block
Weight	WiFi: 340g Cellular:
Operating temperature	-25-75℃
Storage temperature	-25-80℃
Operating humidity	5%-95%
Language	English by default
Software	
Edge computing	Edge acquisition, edge computing, active reporting... Standard version: 300 data points

	Advanced version: 1000 data points
Protocol conversion	Standard version: Modbus, Json Advanced version: Modbus, Json, IEC104, IEC61850, BACnet IP, OPC UA, SL651, DNP 3.0
Acquisition protocol	Standard version: mainstream PLC protocols, Modbus TCP/RTU, DTL645 Advanced version: mainstream PLC protocols, Modbus TCP/RTU, DTL645, IEC104, IEC61850, BACnet IP
Open CPU	Linux Ubuntu 22.04 OS, support C/C++ programming, built-in Node-RED

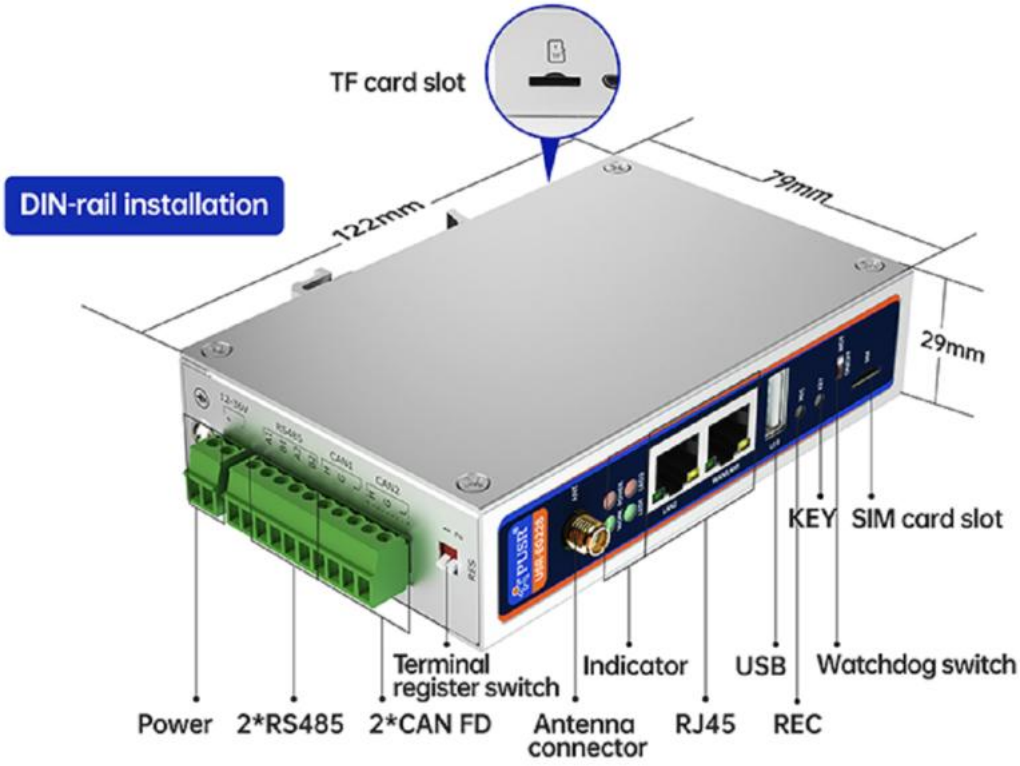
Ordering Guide

Model	Ethernet	Cellular	WiFi	Region	Frequency Band
USR-EG228-GL	√	LTE Cat 4	--	Global	LTE TDD:B34/38/39/40/41 LTE FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66 WCDMA: B1/2/4/5/6/8/19
USR-EG228-EW	√	--	2.4G	Global	--
USR-EG228-C1	√	LTE Cat 1	--	China, India	LTE TDD:B34/38/39/40/41 LTE FDD: B1/3/5/8

Product Dimensions



Product Interfaces


TF card slot
DIN-rail installation
122mm
79mm
29mm
KEY
SIM card slot
Terminal register switch
Indicator
USB
Watchdog switch
Power
2*RS485
2*CAN FD
Antenna connector
RJ45
REC