



# USR-N720

IoT Gateway

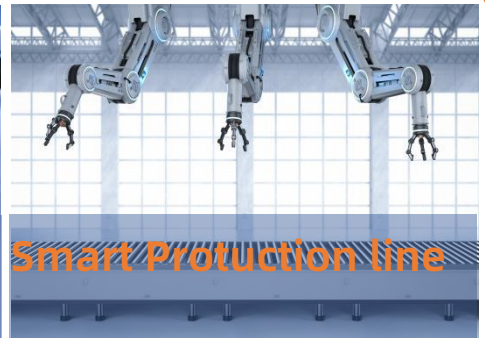


Enhance IoT Processing



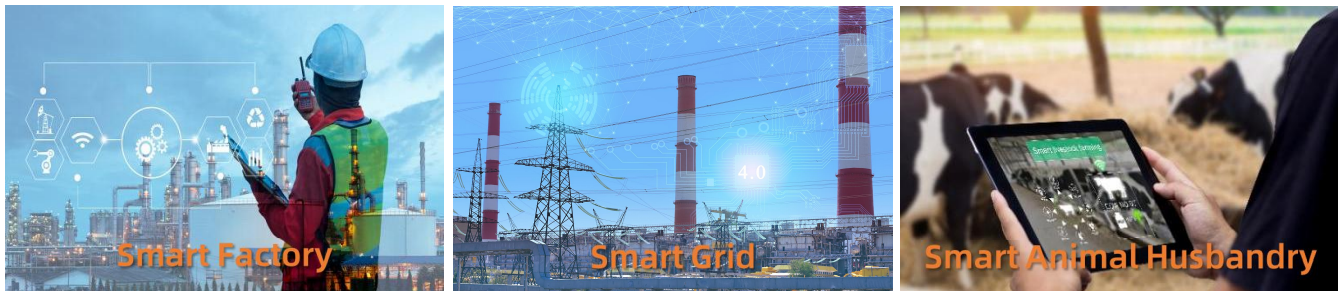
High Performance Rich Interface

Edge computing Up to 1000 Points



## Introduction

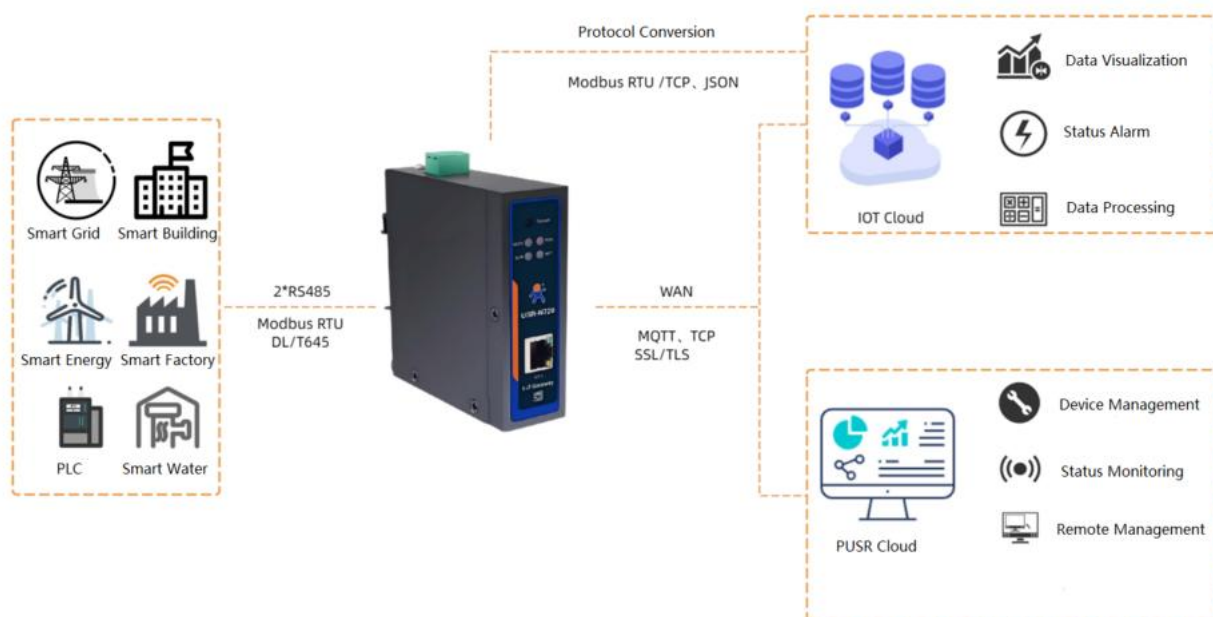
USR-N720 is a high-performance IoT gateway supporting edge computing, edge data acquisition, protocol conversion and data encryption. This product adopts the processor with data encryption and the main frequency is up to 600MHz, designed for industrial-grade stability. It supports communication via TCP(S)/MQTT(S) protocols and facilitates bidirectional interaction with Modbus RTU over TCP and custom JSON protocol data. The USR-N720 can be widely applied in various industrial intelligent solutions, including smart breeding, smart factories, smart agriculture, and smart grid.



## Features

- 2 \* independent RS485, can be used simultaneous;
- Edge gateway function, support edge collection, calculation and active reporting functions, customize json reporting template;
- Support Modbus RTU/ TCP protocol acquisition and DLT645 protocol acquisition, 300-1000 collection points;
- Support protocol conversion, collected data can be directly converted to ModbusRTU/TCP or JSON protocol data;
- Support MQTT and TCP protocol, with SSL encryption, to ensure data security;
- Support SD card to store the offline data when the communication connection is off

## Diagram



## Specification

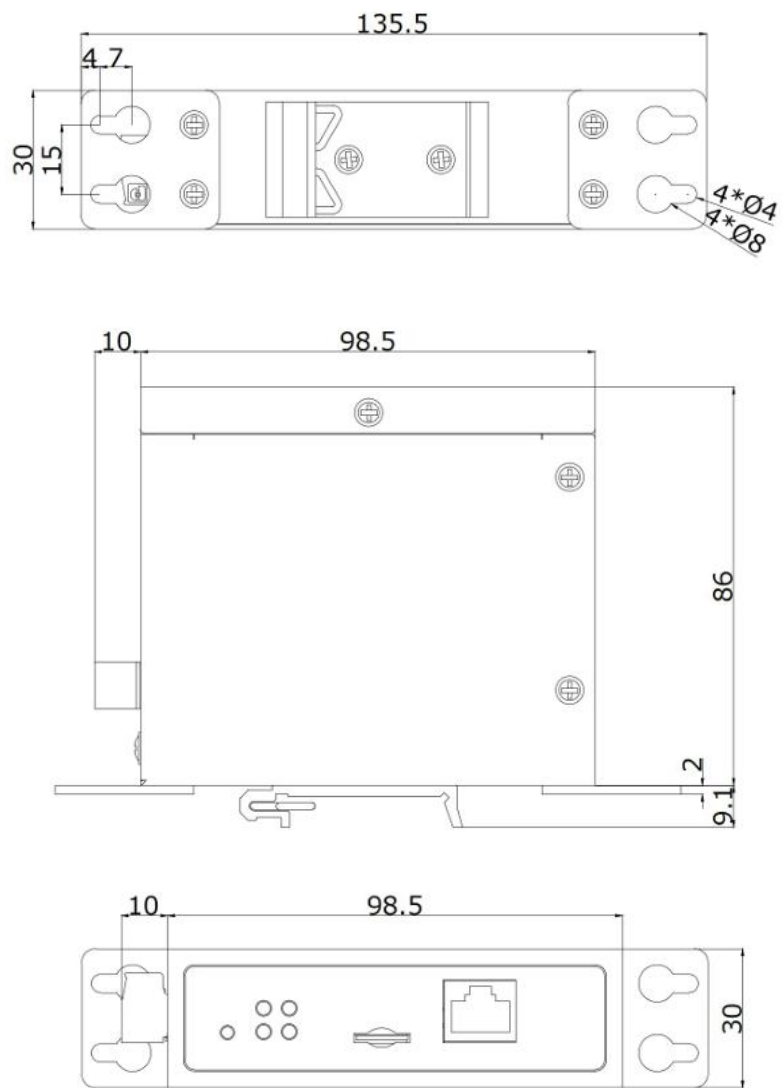
Model	USR-N720-ETH
Processor	RISC-V core
Frequency	Up to 600MHZ
Power	
Power Supply	DC 9-36V, 2-pin terminal blocks
Consumption	Avr: 75mA@12V Max: 85mA@12V
Ethernet	
Port Number	1 x RJ45
Rate	10 /100 Mbps, auto MDI/MDX
Protection	2KV electromagnetic isolation
Serial Port	
Port Number	2 x RS485, 7-pin terminal blocks
Baud rate	600 bps~230400 bps
Data Bits	7, 8
Stop Bit(s)	1, 2
Parity Bit	None, Even, Odd
Physical Character	
Dimensions(mm)	98.5 x 30 x 86 (not including terminal blocks) 118.5 x 30 x 95.1 (Including teiminal blocks)
Installation	DIN rail or wall mounting
Operating Temperature	-40 ~ 85°C
Storage Temperature	-40~105°C
Operating Humility	5% ~ 95% (Non-condensing)
Storage Humility	5% ~ 95% (Non-condensing)
Basic Features	
Network protocol	IP,TCP,MQTT,SSL/TLS,ICMP,ARP,DNS,NTP,DHCP, IPv4
IP Assignment	Static/DHCP
DNS Service	√
Built-in Webpage	√
Config Method	Built-in Webpage, Config Software
Work Mode	TCP Server/TCP client 2 * independent TCP connection supported
Edge acquisition protocol	Modbus RTU, DLT645/2007
Data reporting format	Json, Modbus TCP
Data points	Up to 1000 points
MQTT	Standard MQTT protocol Easy access to mainstream paltform: Thingsboard, AWS,Azure,etc. 2 * independent MQTT connection supported
SSL Encryption	√
Offline data cache	External SD card
Others	
Certificate	*CE, *FCC, *RoHS, *WEEE
Warranty	2 year

## Dimensions

Unit: mm

98.5 \* 30 \* 86, without DIN rail and terminal connectors.

118.5 \* 30 \* 95.1, with DIN rail and terminal connectors.



## Purchase & Support

---

For more information, please visit our websites:

Official website: <https://pusr.com>

Official shop: <https://shop.usriot.com>

Technical support: <http://h.usriot.com/>