

PRODUCT INTRODUCTION

LM Gateway202-Poll, data forwarding gateway. Provide 4 RS-232 / 485 serial ports, 1 10/100 Mbps Ethernet port. Supports one master serial port, three forwarding serial ports, and one forwarding network port. Solve the problem that the field instrument RS485 communication interface is occupied by a master station. Support Modbus RTU, DLT645 protocol.

HARDWARE SPECIFICATION

LM Gateway202 Hardware parameters:	
CPU	ARM926EJ, clocked at 300MHz
RAM	64MByte high performance memory
Nand Flash	128MByte SLC Flash
Serial port	4 fully isolated RS485 interface
Network port	1 100M/10M Ethernet interface
Power supply	DC9V~36V
Total Weight	210g
Enclosure rating	IP51
Mechanical Dimensions	144mm×83.5mm×27mm (L×W×H)
Mechanical installation	DIN rail card slot fixing
LM Gateway202 Environmental parameters:	
Power consumption	The maximum power consumption of the motherboard is ≤3W
Operating temperature	-40~80℃ 20 to 90% non-condensing

INTERFACE DEFINITION

1. POWER

SIGNAL	DESCRIPTION
V+	Power supply
V-	Negative power supply
E	Safety ground

2. DC seat, 5.5*2.1mm

It is recommended to use switching power supply

3. Network port

- 10/100M high speed adaptive network card;
- Unique MAC address.

LAN	IP	Subnet mask
Eth0	192.168.1.233	255.255.255.0

4. CON

PIN	SIGNAL	DESCRIPTION
1	COM1-A	RS485-1 Positive signal
2	COM1-B	RS485-1 Negative signal
3	COM1-GND	Signal ground
4	COM1-TX	RS232-1 Signal sender
5	COM1-RX	RS232-1 Signal receiving
6	COM2-A	RS485-2Positive signal
7	COM2-B	RS485-2Negative signal
8	COM2-GND	Signal ground
9	COM2-TX	RS232-2 Signal sender
10	COM2-RX	RS232-2 Signal receiving

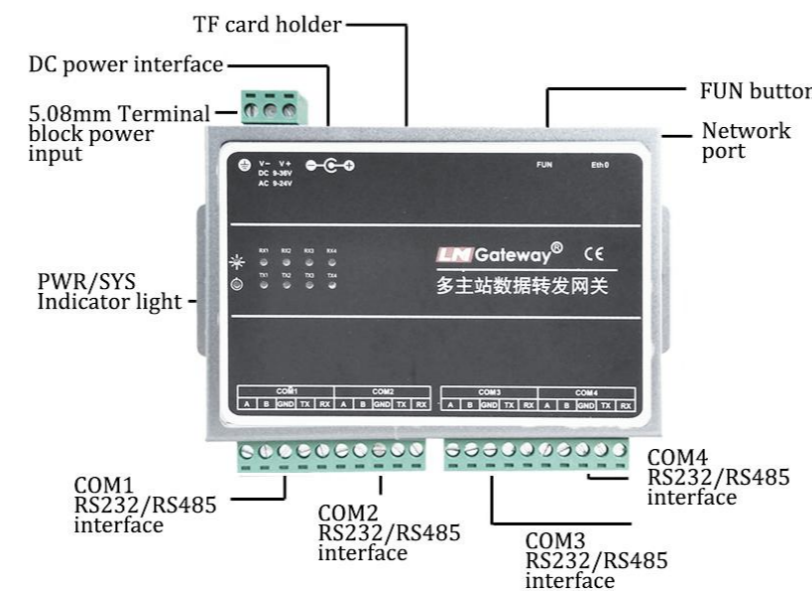
11	COM3-A	RS485-3 Positive signal
12	COM3-B	RS485-3 Negative signal
13	COM3-GND	Signal ground
14	COM3-TX	RS232-3 Signal sender
15	COM3-RX	RS232-3 Signal receiving
16	COM4-A	RS485-4 Positive signal
17	COM4-B	RS485-4 Negative signal
18	COM4-GND	Signal ground
19	COM4-TX	RS232-4 Signal sender
20	COM4-RX	RS232-4 Signal receiving

RS485:

- Fully isolated RS485 interface with three levels of protection;
- Supports the highest level of 4KV protection for the 10/700uS test in the GB/T 17626.5-2008 standard;
- ±15kV human body discharge mode;
- ±15kV IEC1000-4-2 air gap discharge;
- Communication parameters can be configured, default communication parameters: 9600, 8-1-N.

5. LED

PIN	MARK	DESCRIPTION
1	POWER	Power indicator, the light is on
2	SYS	System operation indication
3	RX1-4	Serial port receiving indication
4	TX1-4	Serial port send indication



FEATURES

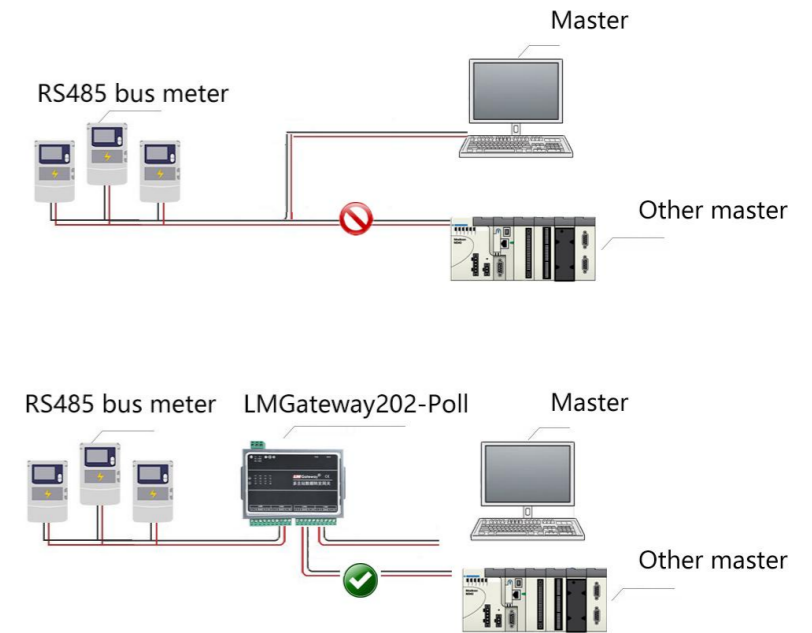
- WEB page settings, plug and play
- The gateway has a learning function to automatically obtain the collected packets of the master station
- Virtually 3 RS485 slave ports
- Solve the problem that the RS485 communication interface of the field instrument is occupied by a master station
- Support Modbus RTU, DLT645 protocol

WORKING PRINCIPLE

- Set one serial port of the gateway as the master station to collect the instruments on the 485 link, and the other serial port or network port as the slave stations to learn the request messages of different master stations.
- The gateway will aggregate all the packets of the slave stations to the master station for collection within the set time. The master station saves all collected results. When the slave station receives these request messages again, it can directly return the

response message, so that multiple master stations can collect at the same time.

- If there is a requirement for the real-time nature of a certain data item, you can set the priority data item of the slave. After the slave parses the request message of this data item, it will regard the message as a priority request message. The master station will collect this message first.
- If the station number filtering function is enabled, the gateway will analyze the station numbers of the packets received from the stations. The station numbers are not in the list specified by the user and will not be collected.



CONFIGURING THE GATEWAY

- Power the gateway;
- Connect the gateway to the computer or switch using a crossover cable; (note that the gateway and the computer are in the same network segment);
- Use webpage configuration, enter the gateway IP in the browser, and enter the forwarding configuration interface

CONTACT US

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