PRODUCT INTRODUCTION

LM Gateway201-OPC UA data acquisition gateway, based on a solid hardware platform design, a complete software kernel. Provides 2 RS-485 serial ports, 1 10/100 Mbps Ethernet ports, and the gateway embeds Modbus, BACnet, DLT645 and other data acquisition drivers to provide data to the upper computer in the way of OPC UA server.

HARDWARE SPECIFICATION

LM Gateway201 Hardware parameters:	
CPU	ARM926EJ, clocked at 300MHz
RAM	64MByte high performance memory
Nand Flash	128MByte SLC Flash
Serial port	2 fully isolated RS485 interface
Network port	1 100M/10M Ethernet interface
Power supply	DC9V ~ 36V
Total Weight	170g
Enclosure rating	IP51
Mechanical Dimensions	130mm×109mm×35mm(L×W×H) Without hanging ears
Mechanical installation	DIN rail card slot fixing
LM Gateway201 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
Vin+	Power supply
Vin-	Negative power supply
E	Safety ground

2．DC seat, 5.5*2.1mm

+ In an environment with poor power quality, it is recommended to use a switching power supply to effectively improve the gateway's anti-interference ability.。

3．Network port

+ 10/100M high speed adaptive network card;

+ It adopts dual-level lightning protection and anti-static protection to resist 2KV lightning strikes; 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	RS485-2 Positive signal
7	COM2-B	RS485-2 Negative signal
8	COM2-GND	Signal ground
9	COM2-TX	RS232-2 Signal sender
10	COM2-RX	RS232-2 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	RUN	System operation indication
3	TX1-RX1	Serial port sending and receiving instructions, sending instructions on the left, receiving instructions on the right
4	TX2-RX2	Serial port sending and receiving instructions, sending instructions on the left, receiving instructions on the right
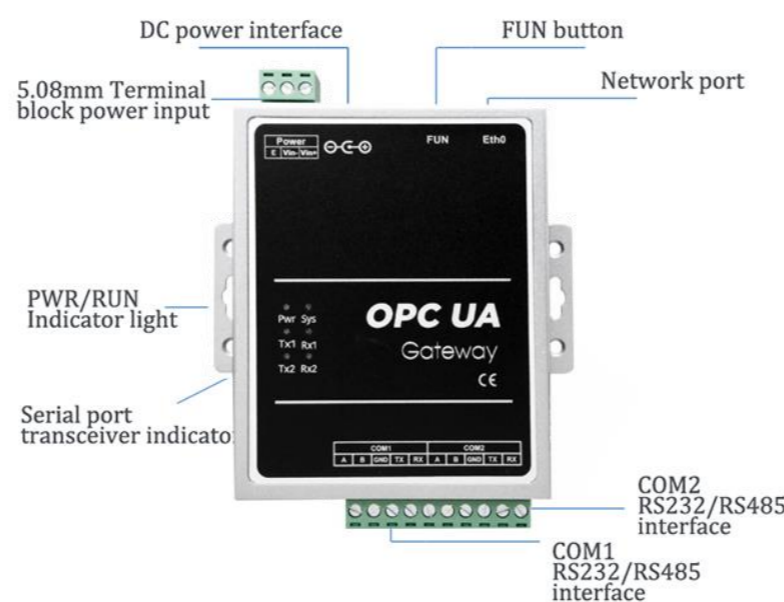
DATA ACQUISITION DRIVER

Network port

+ **Modbus TCP Client**
+ **Modbus RTU_over_TCP**
+ **BACnet IP**
+ **Siemens S7-200 Network**
+ **Siemens S7-1200 Network**
+ **Siemens S7-300 Network**

Serial port

+ **Modbus RTU**
+ **DLT645-1997,DLT645-2007**
+ **CJ188**
+ **Siemens S7-200 PPI**
+ **MBus_EnergyMeter**
+ **Mitsubishi Fx3U**
+ **MBus_EN1434**
+ **BACnet MS/TP**

DATA SERVICE

Provide data to the host computer in the way of OPC UA server

The gateway provides an http server, which supports two common methods of GET and POST. Users can retrieve the real-time data and stored historical data of the gateway through the http server interface.

DATA OPERATION

The data can be calculated by the expression. For example, A represents a collection point, the expression A/100 can be edited, the data is reduced by 100 times, A+0.5, the value is shifted by 0.5, and so on.

DATA STORAGE

The gateway has data storage function, which can realize data storage of I/O points, user points, calculation points and system points. The data of the gateway can only be stored in the TF card.

ALARMS AND EVENTS

The Alarms and Events page allows the user to set the trigger condition for the event, trigger the event when the condition is met, and perform the event release when the state transitions from the satisfied condition to the unsatisfied condition.
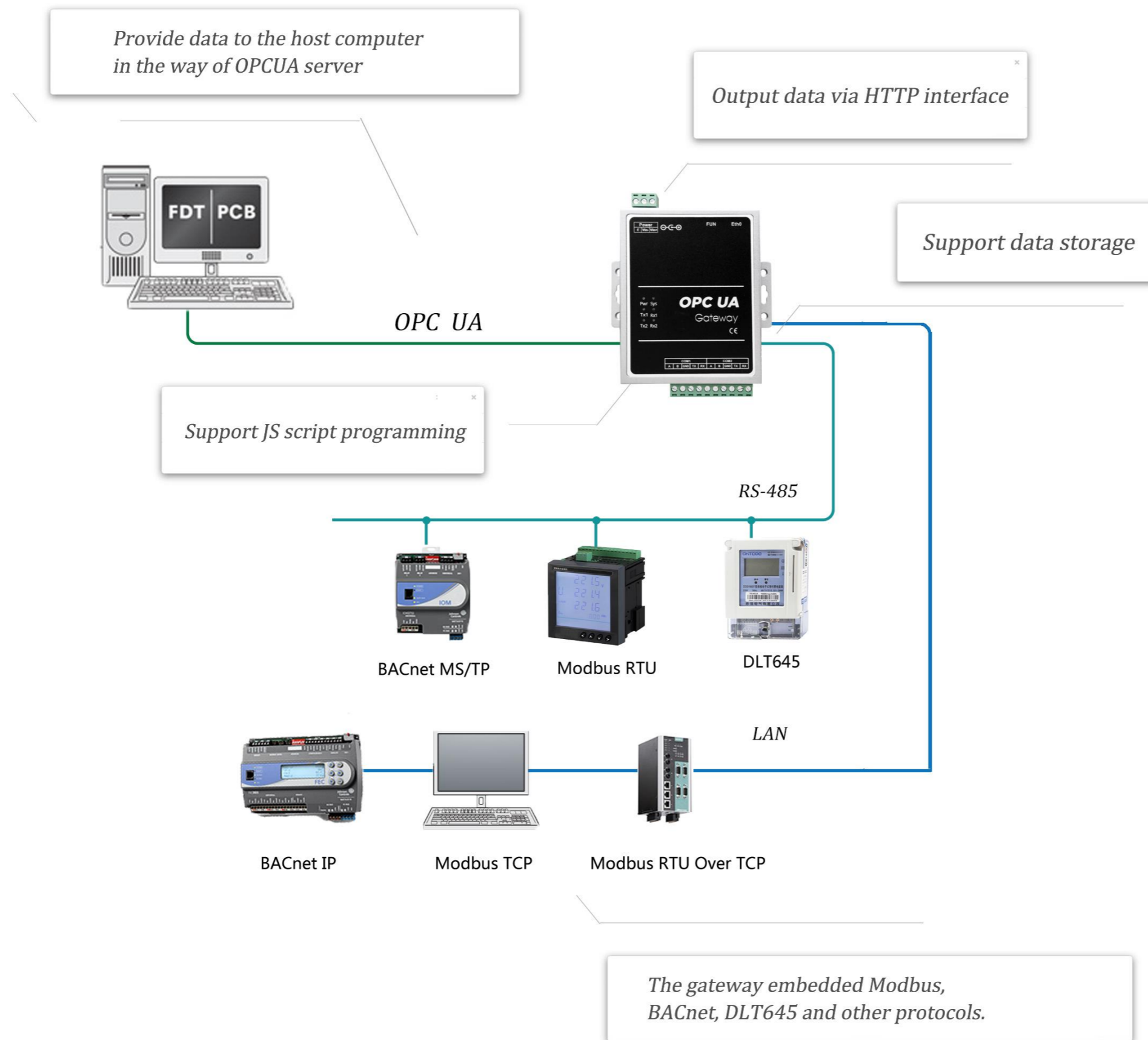
MISSION PLAN

The user establishes a mission plan that specifies the values for multiple points for the day of the week and time period. Please calibrate the gateway time before using the mission planning function

JavaScript EDITING

JavaScript script editor built-in function, user can customize logic control by editing script language

APPLICATION

Gateway supports Modbus RTU, Modbus TCP protocol, Modbus RTU Over TCP protocol, DLT645-1997, DLT645-2007 protocol, CJ188 protocol, BACnet IP, BACnet MS/TP protocol. Provide data to the host computer in the form of an OPC UA server..

Provide data to the host computer in the way of OPCUA server

Output data via HTTP interface

Support data storage

OPC UA

FDT | PCB

OPC UA Gateway

Support JS script programming

RS-485

BACnet MS/TP   Modbus RTU   DLT645

LAN

BACnet IP   Modbus TCP   Modbus RTU Over TCP

The gateway embedded Modbus, BACnet, DLT645 and other protocols.

CONFIGURING THE GATEWAY

1, Power the gateway;

2. Connect the LM Gateway201 data collection gateway to the computer or switch using a crossover cable; (note that the gateway and the computer are in the same network segment);

3. Use the tool software to configure the data acquisition gateway. For the operation, see the configuration manual of the configuration tool.

Download configuration tool

CONTACT US

Huangshan Luomi Measurement and Control Technology Service Co., Ltd.

Sun Chen

18049040679

1926608609@qq.com

www.lmgateway.com