

## APort100 Serial server

### Installation and Operation Instruction V1.2

## DECLARATION

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## 1 Summary

Aport100 serial port server provides the function of serial port to network, which can convert RS-485 serial port into TCP / IP protocol network interface, and realize the data two-way transparent transmission between RS-485 serial port and TCP / IP protocol network interface, so that the serial port device can immediately have the function of TCP / IP network interface, connect the network for data communication, and expand the communication distance of the serial port device.

It can be applied to:

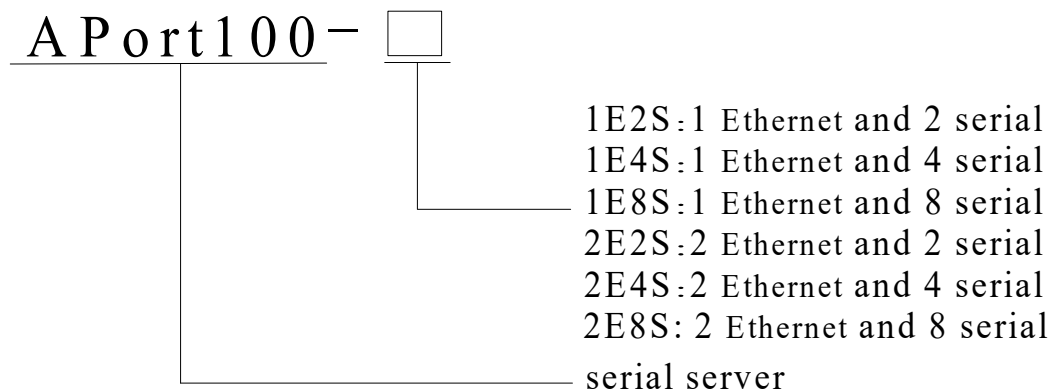
Industrial remote control, remote sensing, telemetry and public utilities;

Automatic data acquisition;

Three prevention and power distribution network monitoring;

Finance, transportation and other industries.

## 2 Product model



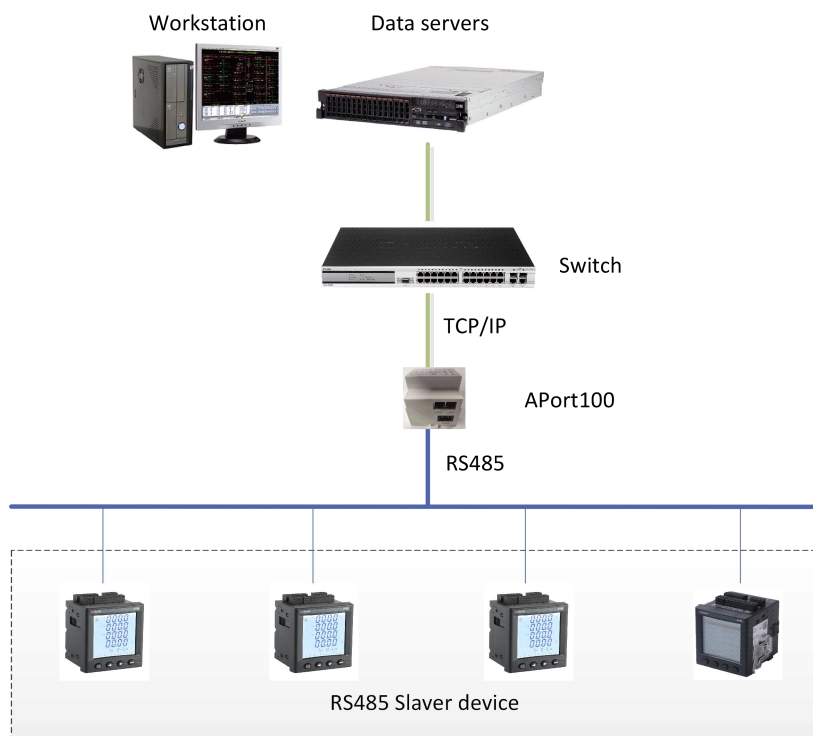
Picture 1

## 3 Functional features

- 1、 2-way 10-100mbits adaptive Ethernet communication, support IPV4,IPV6.
- 2、 Support Web page parameter configuration,UDP broadcast,SNMMP network management,DHCP automatic access IP.
- 3、 It can realize 8-way Sever/Client function,and realize 8-way client connection or 8-way server connection at the same time.
- 4、 8-way RS485 communication, baud rate support 1200-115200 can be set, data bit, check bit, stop bit can be set;each 485 can be connected to 30 meters.
- 5、 The protocol conversion between MODBUS TCP and MODBUS RTU can be realized.

## 4 Typical applications

The typical application connection is shown in Figure 2. The 485 equipment on site is connected to the aport100 serial port server, and the local system is connected to the aport100 serial port server. The serial port server realizes the data conversion from Modbus protocol to tcp/ip protocol and communicates with the equipment.



Picture 2

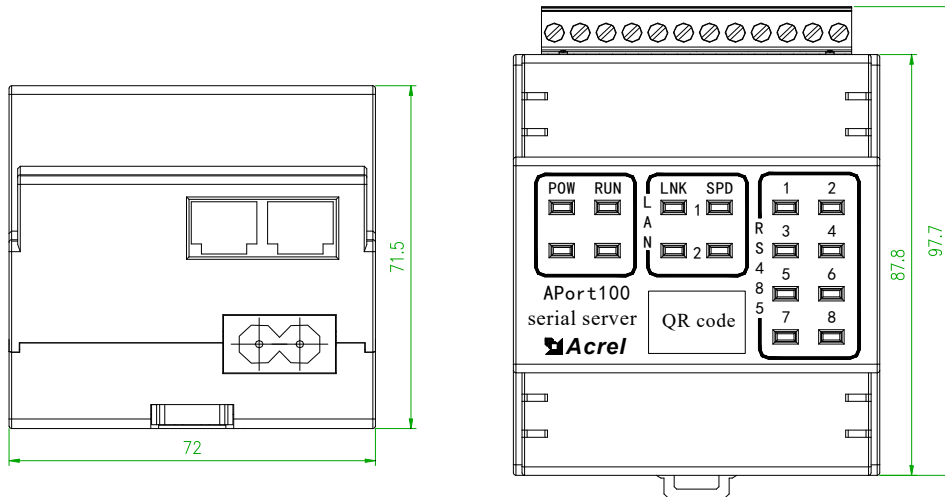
## 5 Technical parameter

<b>appearance</b>			
Interface	RS485: Terminal block		
Power Supply	8-type power socket		
size	4 modules (72mmX88mmX72mm) guide, Moulded shell		
<b>communication interface</b>			
Ethernet	10M/100M* (1/2) , Electrical isolation		
Serial port	RS485* (2/4/8) : 485A、485B、GND, Electrical isolation		
<b>Serial port parameters</b>			
Baud rate	1200~115200bps	Check position	None, even, odd、Space、Mark
Data bits	5~8 位	Flow control	No
<b>Software</b>			
IP mode	IPV4、IPV6		
agreement	TCP、UDP、HTTP、DHCP、SNMP		
Collocation method	Windows desktop tools、Web browser		
Communication mode	TCP / IP direct communication、RS485		
Communication protocol	Modbus RTU、Modbus TCP		
Firmware update	Windows desktop tools、Web browser		
<b>Working mode</b>			
TCP server, TCP client, UDP server, UDP client			
<b>Power requirements</b>			
Power Supply	AC/DC 85-265V (DC 9-36v optional)		
<b>Environmental requirements</b>			

Operating temperature	-25~60℃
Storage temperature	-40~80℃
Humidity range	5~ 95% relative humidity

## 6 Installation and wiring

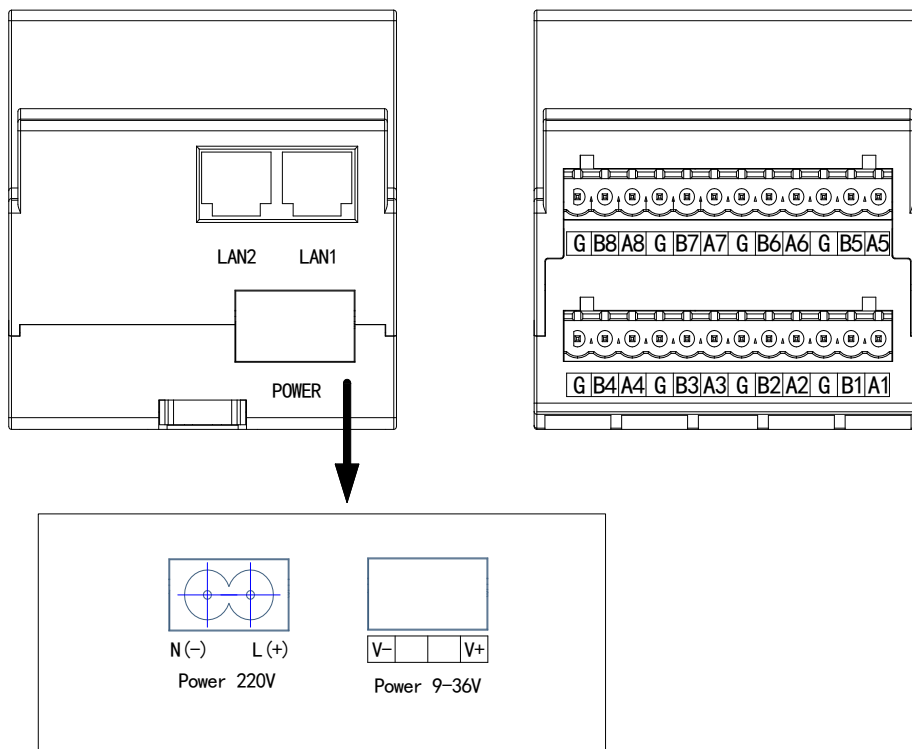
### 6.1 Dimensions



### 6.2 Installation method

APort100 serial servers are installed with 35mm standard rail.

### 6.3 Wiring instructions

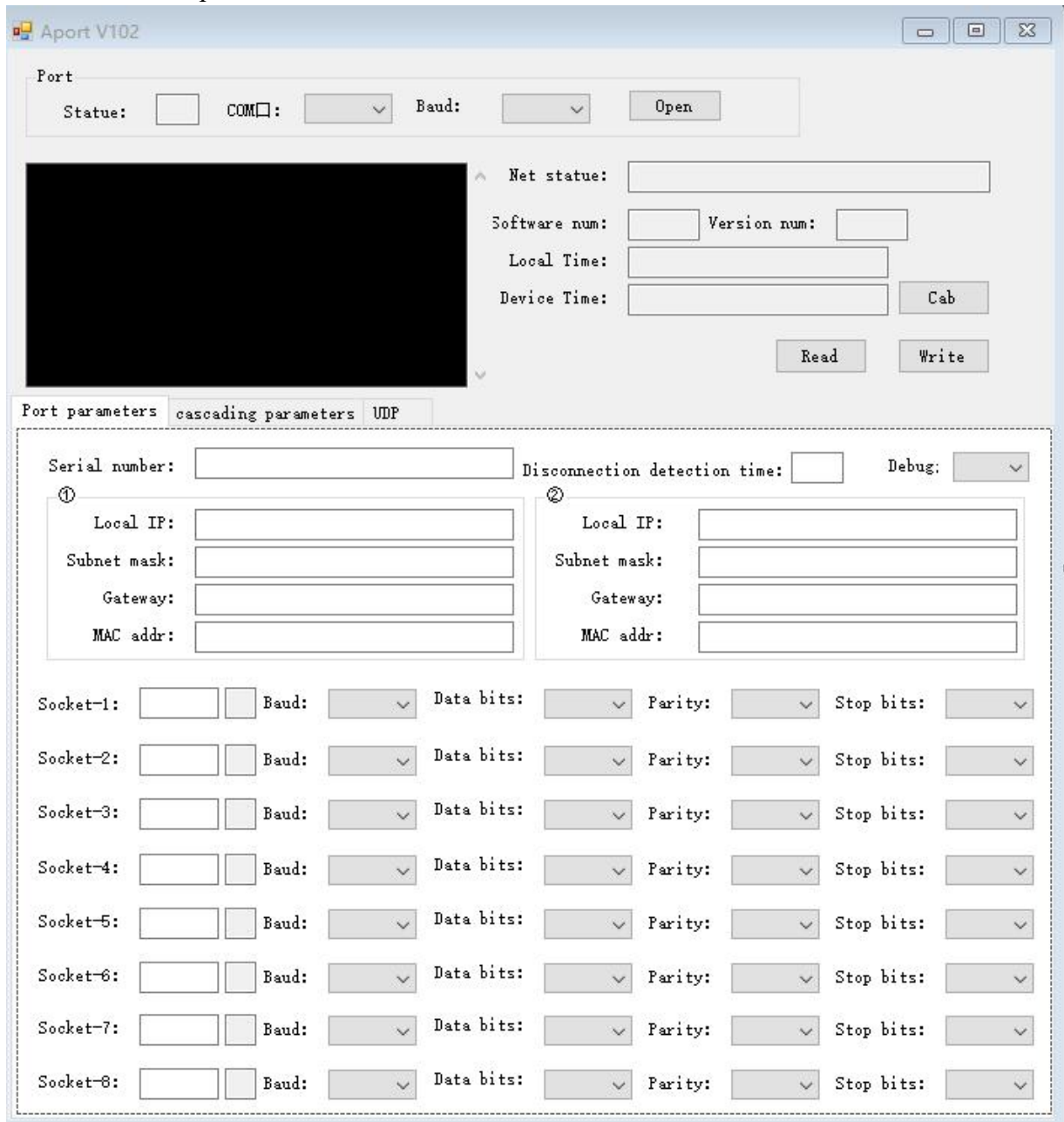


## 7 Panel lamp definition

After the aPort100 serial server is plugged into the Internet cable, the link light will be on and flash when there is data, the speed light will be on at 100MB / s and off at 10MB / s, and the RS485 light will flash when there is data transmission.

## 8 User configuration

### 8.1 Windows desktop tools



Picture 4

As shown in Figure 4, after the device is successfully connected to the host computer (the host status box turns green), it can read the relevant status values and parameter values, and it can also configure the relevant parameters according to the requirements. After writing the correct parameters, click "parameter setting" to write the parameters to the device and save them.

### 8.2 Configuration of web browser

Input box directly input gateway IP address, you can enter the configuration interface, login user name is admin, password is 123.

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## APort100 SerialPort Server

[BasicInformation](#)

[NetParameters](#)

[SerialParameters](#)

[SocketParameters](#)

[OtherParameters](#)

[FirmwareUpgrade](#)

### BasicInformation

TheFirmwareInformation: 1836\_V1000

DeviceNumber: APORT100TEST01

LAN1 IPV4: 192.168.6.163

LAN1 IPV6: c000:0:0:0:0:0:2

LAN2 IPV4: 192.168.1.136

	Port1	Port2	Port3	Port4	Port5	Port6	Port7	Port8
SocketState:	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>	<span style="color: red;">■</span>
LAN ReceivingPacket:	0	0	0	0	0	0	0	0
LAN SendingPacket:	0	0	0	0	0	0	0	0
UART ReceivingPacket:	0	0	0	0	0	0	0	0
UART SendingPacket:	0	0	0	0	0	0	0	0

Note : When the status is red,the socket is not connected;When the status is green,the socket is connected.

Note: it is recommended to use IE browser or Firefox browser.

## 9 Usage method

After setting the parameters according to the above steps, the 485 serial port of the downlink device is connected with aport100 to complete the data exchange.



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