

Vendor Part No.: ALL-SDS102

# ALLNET ALL-SDS102 / RS232/422/485 Modbus to Ethernet, 2x Ser



#### **EAN CODE**



# **Highlights:**

- 2 RS232/422/485 switch selectable serial port
- Low Voltage range of 5~36v DC
- Data Rates range of 600~230.4kbps

#### Introduction of 2 ports RS232/485/422 Serial Device Servers

ALL-SDS102 is a double serial device server, which can realize transparent transmission between TCP/UDP data package and RS232/RS485/RS422 interface. The device has unique functions such as network printing, Modbus multi-host polling and watchdog mechanism. ALL-SDS102 is based on ARM processor and it is internally integrated with TCP/IP protocol. User can easily realize embedded device networking.

# Features of 2 ports RS232/485/422 Serial Device Servers

- Cortex-M4 kernel, industrial working temperature range and TCPIP protocol stack.
- Auto-MDI/MDIX,RJ45 port with 10/100Mbps
- TCP Server, TCP Client, UDP Client, UDP Server and HTTPD Client work mode
- Support network printing
- Support Modbus multi-host polling
- · Two ports can work independently at the same time
- Support Modbus RTU to Modbus TCP
- · Can distinguish which serial port connects to the device via port number
- Support virtual serial port and provide corresponding software USR-VCOM
- Serial baud rate from 600bps to 230.4K bps; Check bit of None, Odd, Even, Mark and Space



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- DNS and DHCP supported
- Provide PC TCP/IP socket programming example such as VB,C++,Delphi,Android and IOS
- Built-in webpage; also can customize webpage for users
- · Reload button, one key to restore default settings
- RJ45 with Link/Data indicator light, built-in isolation transformer and 2 KV electromagnetic isolation
- The global unique MAC address bought from IEEE (begin with D8-B0-4C);user can define MAC address
- Support upgrade firmware via network
- Support keepalive,rapidly detect dead links
- Support account and password, can be used to page login and network settings
- Support one channel Websocket,realize bidirectional transparent transmission between webpage and serial 0
- Two serial ports; each serial can work as rs232,rs485 or rs422; DB9 female; provide rs485/rs422 converter
- Two channel serial communication indicator: TX/RX
- Support DC adapter and 5.08-2 terminal power supply
- Support UDP broadcast function

### **Simple Transparent transmission**

Transparent transmission means that whatever is transferred, our device plays the role of a channel and sends data to the target without modification. On-site monitoring equipment sends data to Serial Device Servers transparent data transmission terminal by itself port, the terminal CUP receives data by serial port and package data.

## Various parameter setting method

#### **Software Settings**

Download settings software, search related Serial Device Servers in the LAN through the serial port server IP, name, MAC address, or the version number. Then set the parameters you need, otherwise keep the default. **Web-page Settings** 

- 1. Open your browser and inter the default IP address of the Serial Device Servers.
- 2. Open the login page of Serial Server, Enter the user name and password (default admin).
- 3. After setting parameter, Click Save and Restart, then setting will take effect.

#### Serial AT commands Settings

User can set parameter by module itself without going through another computer to configure. This setting method is used in the following situation: user have to configure IP address and destination IP address on site. AT command can meet the demand. After MCU connects serial server module by TTL (UART), MCU can configure setting by AT command.

# Application Field of 2 ports RS232/485/422 Serial Device Servers

- Industrial data transmission, industrial automation
- security and protection monitoring, public security
- · Smart home, power control, environmental monitoring, intelligent agriculture
- Door check on work attendance system, POS system, rice selling system
- Building automation system, power monitoring, self-service banking system, telecom machine room monitoring



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# **Application of Serial Device Server**

## **Technical Details:**

**System Information** 

Basic Frequency

Flash

Ethernet

Processor

Port Number

Interface Standard

Rate

Protection

Network Protocol

Receive Buffer

Serial

Port Number

Interface Standard

Data Bits

Stop Bit

Check Bit

Baud Rate

Flow Control

Buffer

Protection

SocketA

**Transparent Transmission Mode** 

Supported Function

SocketB

Software

Virtual Serial(USR-VCOM)

Configuration

**Basic Parameter** 

Size

Operating Temp.

Storage Temp.

Input Voltage

Working Current

Power

More

Cortex-M4

120MHz

512K byte

1

RJ45

10/100 Mbps MDI/MDIX, auto switch between cross and

direct connection

2KV electromagnetism isolation, shell insulation blocking

IP, TCP, UDP, DHCP, DNS, HTTP, ARP, ICMP,

Websocket, HTTPD Client

Max 16k bytes buffer

2 (RS232/485/422\*2), 2 serial ports can simultaneously

work at the different working modes.

RS-232: TX/RX/RTS/CTS

RS-485: A+/B-

RS422: TX+/TX-/RX+/RX-

5, 6, 7, 8

1, 2

None, Even, Odd, Space, Mark

600 bps ~ 230K bps

RTS/CTS/Xon/Xoff

Send and receive 2k bytes respectively

ESD protection, anti-surge

TCP Server/TCP Client/UDP Server/UDP Client

Networking printing, Modbus Gateway, USR-Cloud, self-defined registration package, self-defined network and

serial heartbeat package

TCP Client/UDP Client

Windows 2000 or higher (32 bit/64 bit)

Built-in webpage, computer set-up software, serial

command

150 x 79 x 30 mm

-40 ~ 85°C

-45 ~ 105°C, 5 ~ 95% RH

DC 5 ~ 36V

95mA (aver) @ 5V

45mA (aver) @ 12V

<1W



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Certificate Accessory CE, FCC, ROHS, KCC and WEEE pending 12V power supply, serial line, cable, converter

# **Attributes**

Attribute	Value	
Features:	Seriel	
Weight:	1 Kg	
Warranty:	24 Months	

# **Additional Images**







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