





# **SERIAL DEVICE SERVER**

**Serial to Ethernet MODBUS** 

**Product Datasheet** 

MPN: - AT-SR-232/485-M

### **INTRODUCTION**

The serial device server (SDS) that can make serial device be equipped with networking capability instantly. Our Device is a reliable solution for connecting Modbus TCP networks with Modbus RTU devices in industrial environments. It converts Modbus TCP requests from Ethernet to RTU over serial, and then relays the RTU responses back to the master device via Ethernet. Designed for easy integration and durability, this device enables seamless communication between modern systems and ideal for factory automation, process control, can widely use in PLC control management, Building automation System, Health Care Automation System, measuring instrument and environmental forces monitoring system.

### **APPEARANCE**



POWER PARAMETERS	
No. of Power Inputs	1
Input Voltage	VDC 9V to 36V
Input Current	80mA @24V
Reverse Voltage/ESD Protection	Yes
Short Circuit Protection	Yes
Power Isolation for RS_485	1.5 kV Galvanic
Indications	Power ON, TCP, Serial Communication, Reset

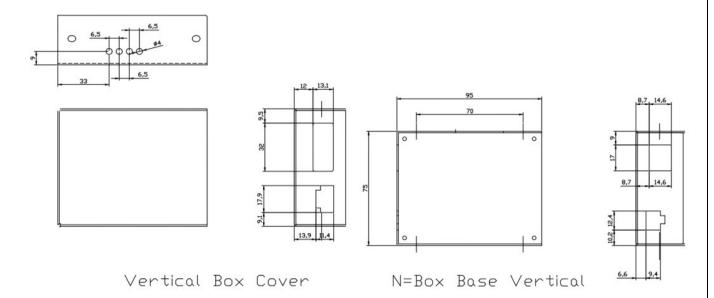
ENVIRONMENTAL LIMITS	
Operating Temperature	10°C to 65°C
Storage Temperature	0°C to 85°C
Ambient Relative Humidity	5 to 95% (non-condensing)
Certifications	RoHS
IP Class	IP-54

PHYSICAL CHARACTERISTICS	
Housing	Metal
Dimensions	96.80mm X 78.15 mm X 34.08 mm (H X L X W)
Weight	290 g
Installation	DIN-rail mounting Panel mounting (optional & Mounting drawing needs to be requested)
MTBF time	80000 hrs , Telcordia (Bellcore) Standard

ETHERNET SPECIFICATION		
10/100BaseT(X) Ports (RJ45 connector)	1 (Interface -RJ-45 Female )	
Magnetic Isolation Protection	1.5 kV (built-in)	
Full Duplex Mode	Support IEEE 802.3x flow control	
Half Duplex Mode	Support CSMA/CD Protocol	
Management	DHCP client	
	IPv4	
	DNS	
	HTTP	
	ARP	
	TCP/IP	
	Telnet	
	BOOTP	
	ICMP	
Configuration Option	Web Console (HTTP)	

SERIAL SPECIFICATION		
Number of ports	2	
Serial Standards	RS-232/RS-485	
MODBUS Support	Yes	
Baud Rate	Custom (Default 115200)	
Parity	None, Even, Odd	
Data Bits	8, 9 bit(including parity)	
Stop Bits	1, 2	
Serial Signal	RS-232: TxD, RxD, RTS, CTS, GND & RS-485: 2W D+, D-,GND	
Pull High/Low Resistor for RS-485	10 kilo-ohms	
Terminating Resistor for RS-485	120 ohm	
RS-485 Data Direction Control	ADDC (Automatic Data Direction Control)	
Galvanic Isolation	2.5 kV	
Reverse Voltage/ESD Protection for RS_485	Yes	
Warranty	1 Year	

## **MECHANICAL DIMENSIONS**



TIME OUT SETTINGS			
Baud Rate	Number of Masters	Serial Timeout	
2400	1	1000	
2400	2 & 3	2000	
9600	1 to 3	800	
9600	Up to 6	800	
19200	1, 2	400	
19200	Up to 7	400	
115200	Up to 7	400	

**Default:** server timeout 1000 Ms and serial timeout 400 Msec.

Note 1: When BR increases the serial Timeout Decreases.

**Note 2:** When the register quantity increase the serial timeout also increases (depends on your slave response timing).

Note 3: When you increase no. of masters, also increase the response timeout of master in your application.

ORDERING INFORMATION	
MPN	Description
AT-SR-232/485-M	Single Port Serial Device Server with MODBUS
AT-SR-232/485-M-P	Single Port Serial Device Server with MODBUS Panel Mounting

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