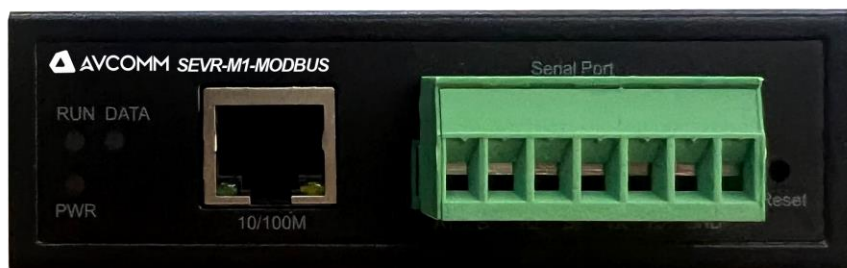




AVCOMM®

SEVR-M1-MODBUS Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.



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Protocol Conversion Gateway, Modbus/Ehternet

SEVR-M1-MODBUS

SEVR-M1-MODBUS provides the Modbus gateway function, which can convert multiple cascaded ModbusRTU Slave data into ModbusTCP messages, and supports multiple ModbusTCP Master access control. Or it converts multiple ModbusTCP slave data into ModbusRTU messages, and supports multiple ModbusRTU Master access control.



Product Features

- With metal shell, a variety of installation design, suitable for industrial control site applications
- Wide power input (12~57.6VDC), suitable for different field power supply
- 1 x RS232/RS485/RS422 serial port
- Support a wide baud rate: 300-921600bps, suitable for applications between different devices
- Supports multiple operating modes: ModbusRTU Master/Slave, ModbusTCP Master/Slave
- Support upgrading web firmware for special applications in different occasions



Ordering Information

Model Name	Description
SEVR-M1-MODBUS	1 x 10/100M RJ45 port to 1 x RS-232/485/422 Modbus gateway, -40°C-85°C

Technology		
Processor	32-bit LX6 240MHZ microprocessor	
Storage	520K	
Ethernet interface	10/100M(Built-in 1.5KV electromagnetic isolation) auto MDI/MDI-X Ethernet interface, interface RJ45	
Serial Standard	RS-232, RS-485, RS-422	
Port	7pin 5.08 pluggable terminal block	
Indicator light	Power indicator light PWR, Running indicator light RUN, Serial port transceiver indicator DATA	
Power connector	DC-005 DC socket or 3Pin 5.08 terminal for power supply, with built-in protection against reverse connection, to avoid damage to the equipment by wrong positive and negative connection	
Power range	DC12~57.6V	
Function buttons	1x factory reset button RESET	
Max. power consumption	12V@50mA	
Enclosure Material	Metal	
Ingress Protection	IP30	
Installation	Default DIN Rail mounted, fixed plate mounted (wall mounted optional)	
Operating environment	Storage temperature: -40~85° C, Operating temperature: -40~85° C , Relative humidity: 5 ~95% (Non-condensation)	
Elevation	0~4000m	
Dimension	100mm×80.8mm×30mm (without installation kit)	
Weight	248g	
Software		
Protocol support	ARP、IP、ICMP、UDP、TCP、HTTP、DHCP、MODBUS	
Configuration method	Web browser, VCOM Utility (Virtual COM Only Windows)	
Operating Mode	ModbusRTU Master/Slave, ModbusTCP Master/Slave	
Baud rate	300-921600bps	
Data Bits	5、6、7、8	
Stop Bits	1、2	
Check Bits	None、Odd、Even	
Flow Control	RTS/CTS、DTR/DSR、XON/XOFF (Only RS-232)	
Product Certification		
Standard	Complies with IEC/EN 62368-1	
EMC Test		
Item	Standard requirement	Reference standard
Conducted interference	CLASS A	EN55032
Radiated interference	CLASS A	EN55032
EFT	Signal port: 1kV, repetition rate 5kHz; Tr/Th:50ns; Criterion: B	IEC61000-4-4
ESD	Contact discharge 6kV; Air discharge 8kV; Criterion: B	IEC61000-4-2
CS	Strength: 3V; Frequency band: 150kHz~80MHz ; Criterion: A	IEC61000-4-6
RS	Field strength: 3V/m; Frequency band: 80MHz~2.7GHz; Criterion: A	IEC61000-4-3
SURGE	Power supply: 1kV (line-line) 2kV (line-ground) 1.2/50 Signal: 0.5K (line-line) 1kV (line-ground) 10/700 Criterion: B	IEC61000-4-5

Indicator definition

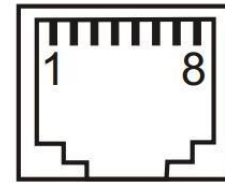
Name	Color	Function	Status
PWR	Red	Power indicator light	Power on:On, Power off: Off
RUN	Green	System operation indicator light	0.5S on, 0.5S off alternately flashes
DATA	Green	Serial port data transceiver indicator light	Data:flashing,No data:off

Interface definition

1. Ethernet RJ45 interface definition

100Base-T pins are defined as shown in the following table:

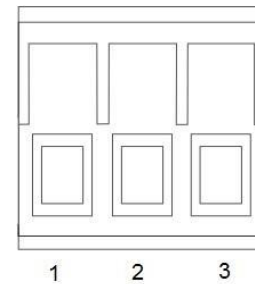
Pin number	MDI signal	MDI-X signal
1	BI_DA+/TX+	BI_DB+/RX+
2	BI_DA-/TX-	BI_DB-/RX-
3	BI_DB+/RX+	BI_DA+/TX+
4	-	-
5	-	-
6	BI_DB-/RX-	BI_DA-/TX-
7	-	-
8	-	-



Note: "TX±" is sending data±, "RX±" is received data±, "-" is unused

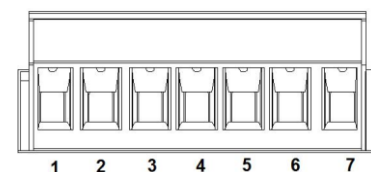
2. Power interface terminal definition:

5.08 Terminal block	Power connector
1	V+
2	PGND
3	V-



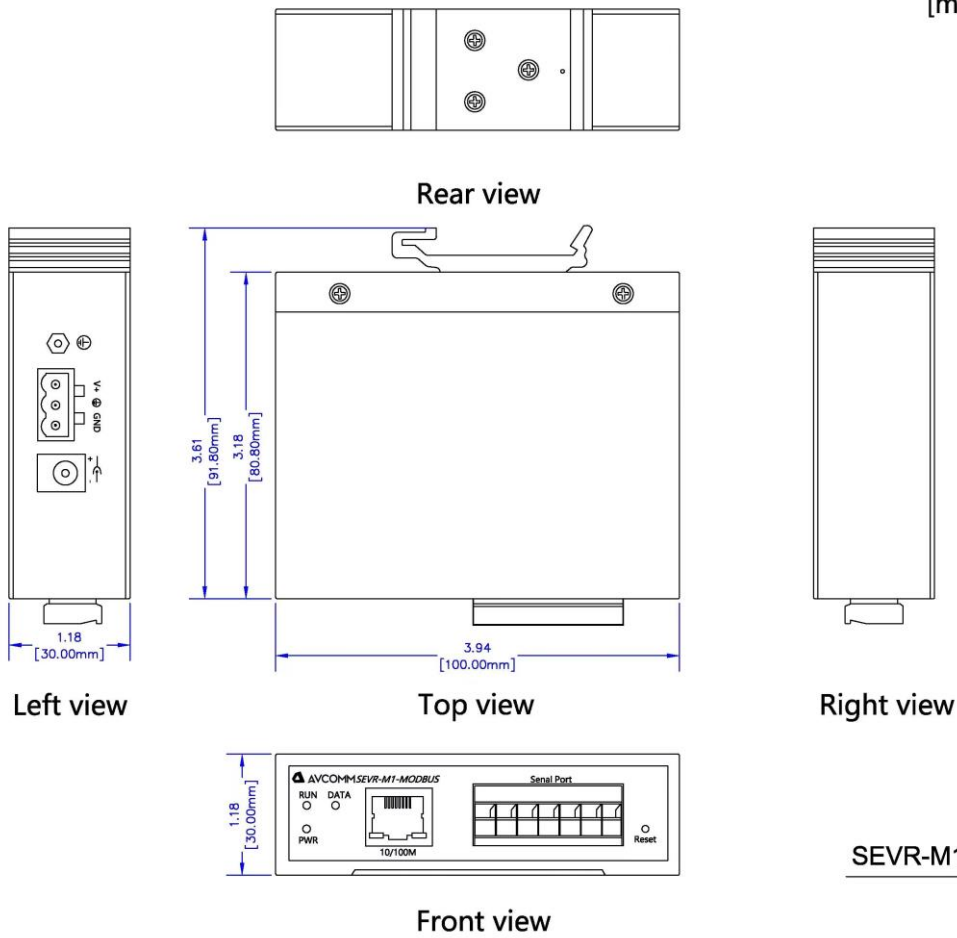
3. Terminal serial port definition

7Pin 5.08 terminal	RS-485	RS422	RS232
1	A(DATA+)	A (TxD+)	-
2	B(DATA-)	B (TxD-)	-
3	-	A (RxD+)	-
4	-	B (RxD-)	-
5	-	-	TX
6	-	-	RX
7	-	-	GND



Installation dimensions

Unit: $\frac{\text{inch } \pm 0.040}{[\text{mm}] \pm 1.00}$



SEVR-M1-MODBUS