

# AVCOMM Serial Sever SEVR-M1-MODBUS User Manual



## **AVCOMM Technologies Inc.**

# **SEVR-M1-MODBUS**

# **User Manual**

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#### **About This Manual**

This user manual is intended to guide a professional installer to install and configure the SEVR-M1-MODBUS. It includes procedures to assist you in avoiding unforeseen problems.



Only qualified and trained personnel should be involved with installation, inspection, and repairs of this device.

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## 1. Hardware wiring



#### **1.1 Power Supply**



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

#### **1.2 Serial Port**



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	-	-	ТΧ
6	-	-	RX
7	-	-	GND

According to the actual type of serial port used, you can wire it according to the table.

#### **1.3 Ethernet Port**

Access to ModbusTCP LAN via RJ45 network cable





### **1.4 Indicator Light**

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

## 2. Software Configuration

Follow the 8 steps in the figure below to get the gateway run for testing.

(1) Connect the gateway and the computer to a local area network through a switch or directly, and the gateway default IP is 192.168.1.125. Set the IP address of the computer to the same CIDR segment, such as 192.168.1.10

(2) Open a browser such as Google Chrome and type 192.168.1.125. in the address bar. Then enter the login page, enter the default username admin and default password admin to enter the settings.



(3) Serial port settings: configure baud rate, data bits, etc. according to the parameters of the actual serial device.

Serial Port Settings	Serial Port Ser	ttings		
Network Port Settings	Serial Port			
System Management	Serial Port	• 1		
Modbus Settings	Serial Port Para	neters		
User Settings	Interface:	R\$485	~	Choose different modes according to the actual serial port type.
Save Settings	Baud Rate:	9600	~	
	Data Bits:	8	~	
	Stop Bits:	1	~	
	Parity:	None	~	
	Timeout:	100		(0-5000ms)
	Working Mode:	ModbusRTUMaster	~	Here the serial port is default, and the gateway serial port

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(4) Network settings: The gateway should be in the same LAN as the ModbusTCP device and can ping each other

Serial Port Settings	Network Port S	Settings Set networ actual networ	k port parame vork.	ters. You can r	modify IP and othe	r parameters according to th
Network Port Settings	Network Port Par	rameters				
System Management	IP Address:	192 168 1 125				
Modbus Settings	Subnet Mask:	255 255 255 0				
User Settings	Gateway:	192.168.1.1				
Save Settings	DNS Server1:	0.0.0.0				
	DNS Server2:	0.0.0.0				
	Ethernet Port Rate:	Auto Negotiation	~			
	DHCP:	Disabled	~			

(5) Modbus settings: set the Modbus listening port and map the address by default.

Serial Port Settings	Modbus Setti	ngs		The Listener port is the port	of ModbusTCP	connects to the			
Network Port Settings	Listener Port:	502		gateway for ModbusTCP communication.					
System Management	Polling Time:	volling Time: 200 (0-10000ms)							
Modbus Settings	Address transla	Address translation settings							
User Settings	In	dex	Туре	Slave ID Mapping (Virtual<=>Real)	Destination	Operation			
Save Settings		1	Serial Port	1-247 <=> 1-247	Serial1	Delete			
	Туре:	Serial Port	~						
	Slave ID From:		to						
	Slave ID Offset:								
2	Destination:	Serial1	*						
	Add								

(6) For each setting page above, you must click Restart after modifying the parameters to take effect

		English 🗸
Serial Port Settings	Save Setting	
Network Port Settings	Save And Restart	
System Management Modbus Settings	Please check all Settings and press the restart button to take effect.	
User Settings Save Settings	After every time you click Settings on another page, click Restart on this page for it to take effect.	



#### (7) Use ModbusPoll and ModbusSlave for simulation testing

Mbp	oll4.mbp	4 5 40 40	1000				Mbe	slave4.mbs					
x = 92	69: Eff = 50: ID :	= 4: F = 03: SR =	= 1000ms		1		n ID = 4:	F = 03					
	00000	00010	00020	00030	00040	00050		00000	00010	00020	00030	00040	0005
0	5	0	0	0	0	0	0	5	0	0	0	0	
1	0	0	0	0	0	0	1	0	0	0	0	0	
2	0	0	0	0	0	0	2	0	0	0	0	0	
3	89	0	0	0	0	0	3	89	0	0	0	0	
4	5	0	0	0	0	0	4	5	0	0	0	0	
5	0	0	0	0	0	0	5	0	0	0	0	0	
6	0	0	0	0	0	0	6	0	0	0	0	0	
7	99	0	0	0	0	0	7	99	0	0	0	0	
8	77	0	0	0	0	0	8	77	0	0	0	0	
9	0	0	0	0	0	0	9	0	0	0	0	0	

(8) AS shown in the picture below, you can perform a Web upgrade.

		English 👻
Serial Port Settings Network Port Settings	System management System Information	
System Management	Device Model: SEVR M1-MODBUS	
Modbus Settings	Firmware Version: V1.0.13	
User Settings	Hardware Version: 40021254	
Save Settings	Load Factory Default	
	Load Factory Default settings Load Factory Default	
	Upgrade Firmware	
	Select The Firmware And Upgrade: Select File Upgrade	
102.000.000	You can use the upgrade package provided by AVCOMM to upgrade.	