



AVCOMM®

# SEVR-M1 Datasheet

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



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SEVR-M1 device server provides serial port to Ethernet port function. It converts RS-232/485/422 port to TCP/IP port, allows bidirectional data transmission between RS-232/485/422&TCP/IP. This makes the serial device support TCP/IP function. It supports IEEE 802.3AF standard, the POE function greatly extend the communication of serial devices.



## Product Features

- Processor: 150MHz
- Storage: Data cache space ≥ 60KB per port
- Network port: RJ45 interface 10/100M (embedded 2KV electromagnetic isolation, surge 10/700us common mode: 2000V/differential mode 1000V) Adaptive MDI/MDI-X
- POE standard: Support IEEE802.3AF standard
- Network protocols: IP, ICMP, UDP, TCP, HTTP, TELNET, DNS, DHCP
- System support: Windows /XP/2003/win7/win8/win10 32/64bit
- Operation modes: VCOM, TCP SERVER, TCP CLIENT, UDP, Serial Telnet Mode , Remote Pair mode, RFC 2217, Modbus TCP server, Modbus TCP client
- Operating current: 350mA@12V max
- Power connector: 5.08mm 3Pin terminal block and DC socket
- Operating temperature: -40 ~ +85°C
- Storage temperature: -40 ~ +85°C
- Relative Humidity: 5% ~ 95%RH, Non-condensation
- Number of hosts: 4 hosts can be connected simultaneously
- Configuration method: Web browser, VCOM Utility, Telnet
- Number of serial ports: 1, DB9 connector and 3.81-4PIN terminal
- Serial port protection: RS-232/485/422 surge 10/700us common mode/differential mode 0.5KV
- Baud rate: 300-921600bps
- Check bits: None, Odd, Even, Mark, Space
- Data bits: 7, 8
- Stop bits: 1, 1.5, 2
- Flow Control: RTS/CTS, XON/XOFF
- Supply voltage: 5V (4.75~5.25V), 12-36VDC, 12-60VDC, POE power supply optional, surge 1.2/50us common mode:2000V/differential mode 1000V
- ESD protection: 6KV for whole machine contact, 8KV for air

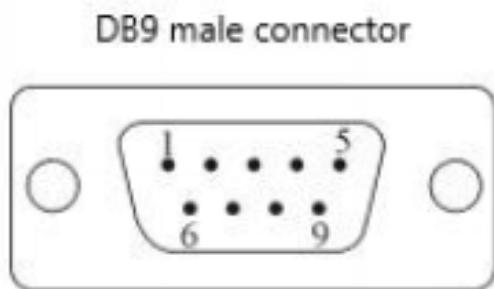
## Ordering Information

Model	Signal/Port		Port Qty		Protection			Baud rate
	TCP/IP	RS-232/485/422	TCP/IP	RS-232/485/422	Power	TCP/IP	RS-232/485/422	
SEVR-M1	RJ45	RJ45	1	1	2KV	2KV	Common/differential mode 0.5KV	300-921.6K

Technology	
<b>Processor</b>	32bit 400MHZ
<b>Storage</b>	128M
<b>Ethernet interface</b>	10/100M(Built-in 1.5KV electromagnetic isolation) auto MDI/MDI-X Ethernet interface, interface RJ45
<b>Serial Standard</b>	RS-232, RS-485, RS-422
<b>Serial Connector</b>	1×RJ45
<b>Indicator light</b>	Power indicator light PWR, Running indicator light RUN
<b>Power connector</b>	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
<b>Power range</b>	DC12~48V
<b>Function buttons</b>	1 factory reset button RESET
<b>Max. power consumption</b>	1.6W
<b>Enclosure Material</b>	Metal
<b>Ingress Protection</b>	IP30
<b>Operating environment</b>	Storage temperature: -40~85° C Operating temperature: -40~85° C Relative humidity: 5 ~95% (Non-condensation)
<b>Dimension</b>	100mm×80.8mm×30mm (L x W x H)
<b>Weight</b>	270g
Software	
<b>Operating System</b>	Based on Linux
<b>Protocol support</b>	ARP,IP,ICMP,UDP,TCP,HTTP,DHCP,SNMP,MQTT,MODBUS
<b>Configuration method</b>	Web browser, VCOM Utility (Virtual COM Only Windows)
<b>Operating Mode</b>	VCOM, MCP, TCP Server, TCP Client, UDP, Remote Pair Mode, Modbus TCP Server, Modbus TCP Client, MQTT
<b>Baud rate</b>	300-921,600bps
<b>Data Bits</b>	5,6,7,8
<b>Stop Bits</b>	1,2
<b>Check Bits</b>	None, Odd, Even
<b>Flow Control</b>	RTS/CTS,DTR/DSR,XON/XOFF ( Only RS-232 )
Product Certification	
<b>EMC</b>	55032/24
<b>EMI</b>	Class A
<b>EMS</b>	IEC61000-4-2 ESD: Contact 4kV,Air 8kV IEC61000-4-3 RS: 80MHz-1GHz 3V/m IEC61000-4-4 EFT: Power 1kV,Signal 0.5kV IEC61000-4-5 Surge: Power differential mode 1KV, common mode 2KV ( 8/20 ) Ethernet ports differential mode 1KV, common mode 2KV ( 10/700 ) RS-232/485/422 differential mode 0.5KV, common mode 1KV IEC61000-4-6 CS: 150KHz-80MHz 3V/m

## Pin definitions

### 1. SEVR-M1 RS-232 Pin Definitions



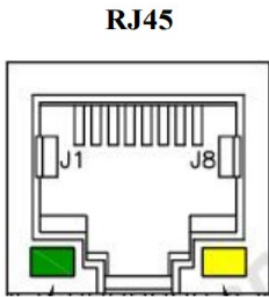
RJ45	RS-232
1	N/C
2	RxD
3	TxD
4	N/C
5	GND
6	N/C
7	RTS
8	CTS

### 2. SEVR-M1 Serial Server RS-485/422 Pin Definitions



3.81Terminals	RS-485	RS-422	Description
1	T/R+	TX+	Sending/Receiving+
2	T/R-	TX-	Sending/Receiving-
3		RX+	Receiving+
4		RX-	Receiving-

### 3. SEVR-M1 Serial Server RJ45 Network Port Pin Definition



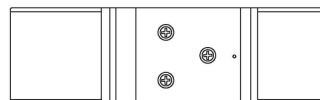
Green light for link  
Yellow light for ACT

RJ45	EIA/TIA 568B	Definition	Description	EIA/TIA 568B
1	Orange&White	TX+	Sending+	TX+
2	Orange	TX-	Sending-	TX-
3	Green & White	RX+	Receiving+	RX+
4	Blue	Data+	Bidirectional data+	Data+
5	Blue & White	Data-	Bidirectional data-	Data-
6	Green	RX-	Receiving-	RX-
7	Brown & white	Data+	Bidirectional data+	Data+
8	Brown	Data-	Bidirectional data-	Data-

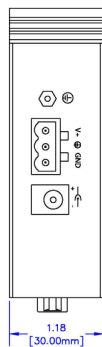


### Installation dimensions

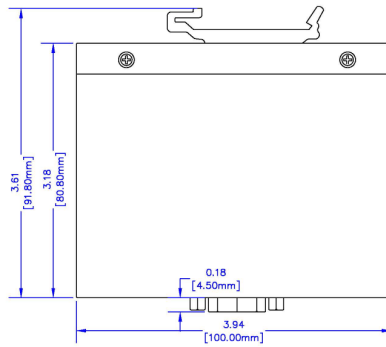
Unit:  $\frac{\text{inch} \pm 0.040}{[\text{mm}] \pm 1.00}$



Rear view



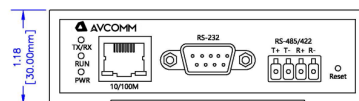
Left view



Top view



Right view



Front view