Enapter ENP-RS232-VED Module Datasheet

RS-232-VED Module

The RS-232-VED Module monitor and manage Victron Energy Inverters with RS-232 port and VE.Direct Protocol. It sends the collected data to the Enapter Gateway and Cloud via secure wireless connection. The RS-232-VED Module is based on Enapter RS-232 Module.

To connect the ENP-RS232-VED Module to Victron Energy Inverters you need the Victron Energy VE.Direct to RS232 Cable.

The connection cable to the Victron Energy VE.Direct to RS232 Cable is required additional 5 V DC power supply.

Technical Data

Voltage	9…60 V DC
Standardized Wire Gauge	AWG 17 (1 sqm^2)
Wireless Communication	Wi-Fi 2.4 GHz, Bluetooth 4.0 LE
Integrated connection type	RJ-10/4P4C
Antenna connection type	SMA-F (module) – SMA-M (antenna)
Local signaling	1 LED (green) steady – correct operation blinking – establishing connection with server
	1 LED (red) module error
Current consumption	50 mA 12 V DC, max. 300 mA
Mounting	35 mm Din rail acc. to IEC 60715
Height	90.2 mm (3.55 inch)
Depth	57.5 mm (2.26 inch)
Width	18.1 mm (0.71 inch)
Net weight	0.050 kg

Environmental Conditions

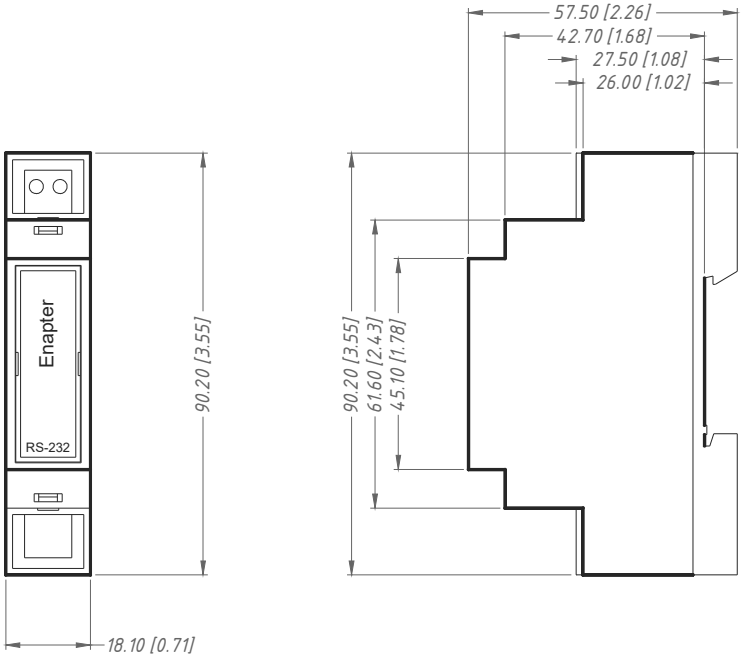
Ambient air temperature for operation	-40…+60 °C
Ambient air temperature for storage	-40…+60 °C
Relative humidity for operation	20…90 %, without condensation
Relative humidity for storage	20…90 %, without condensation
Operating altitude	0…2000 m
Storage altitude	0…3500 m
Pollution degree	2
IP degree of protection	IP20

Connected device

Type	Victron Energy Inverters
Connection to Module	RJ-10/4P4C
Connection to VE.Direct to RS232 Cable	DB9-M (required 5 V DC power supply)
Connection Cable Length	1.0 m

Dimensions

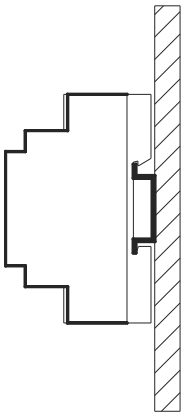
The dimensions are in mm and in brackets in inch.



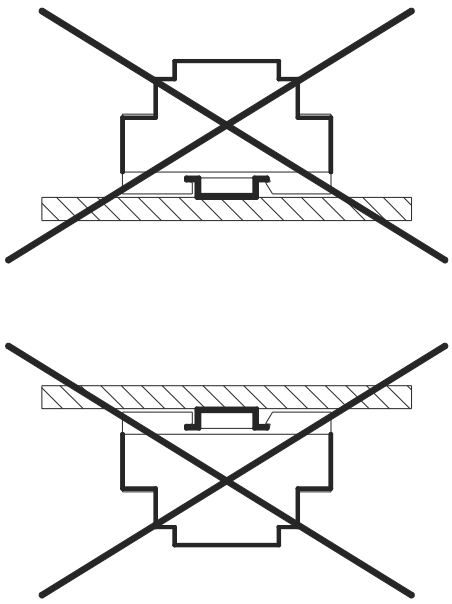
Mounting

The ENP-RS232-VED Module must be horizontally mounted on 35 mm DIN rail according to IEC 60715.

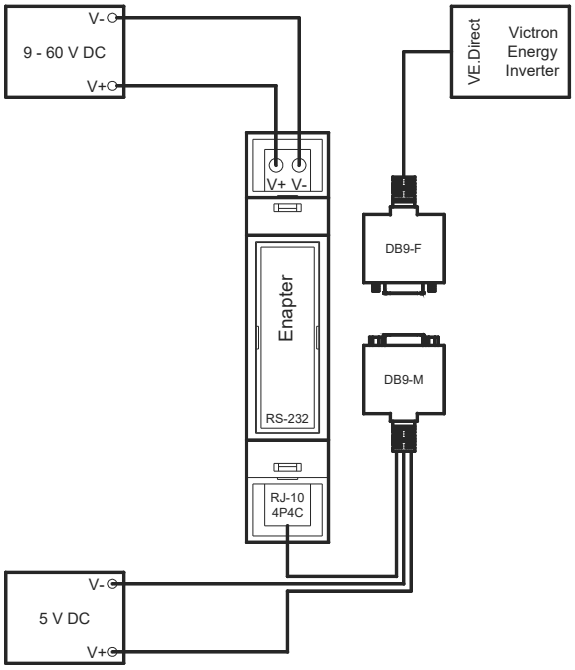
Correct Mounting Position



Incorrect Mounting Position

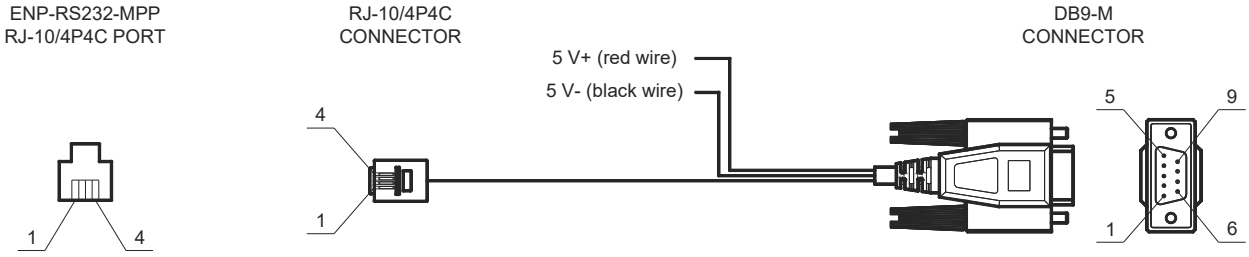


Connection Example



Note: 1 Amp Circuit Breaker recommended to use on power line for the ENP-RS232-VED Module.

Connection Cable Pinout



ENP-RS232-VED RJ-10/4P4C PORT PIN	RJ-10/4P4C PIN/SIGNAL		DB9-M PIN/SIGNAL	
4	1	GND	5	GND/5 V-
3	2	GND		
			4	5 V+
2	3	TXD	3	TXD
1	4	RXD	2	RXD

Standards

Wi-Fi protocols – 802.11 b/g/n/e/i (802.11n up to 150 Mbit/s).

Bluetooth protocols – Bluetooth v4.2 BR/EDR and BLE specification.

Warnings

Alternating current voltage of 110 – 220 V is potentially lethal!

All works on assembly and installation should be performed only with a disconnected power supply!

The installation and assembly of electrical equipment must be carried out by electrically qualified persons.

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