

Enapter ENP-DI7 Module Datasheet



Digital Input Module

Digital Input Module is used to monitor the status of discrete signals such as contactors, relays and others. ENP-DI7 Module can work in wet or dry contact modes (set by the jumper inside the module). The Digital Input Module sends the collected data to the Enapter Gateway and Cloud via secure wireless connection.

Technical Data

Voltage	9...24 V DC
Wireless Communication	Wi-Fi 2.4 GHz Bluetooth 4.0 LE
Integrated connection type (optional)	Isolated RS-485 interface
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	36.3 mm (1.43 inch)
Net weight	0.090 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 digital device

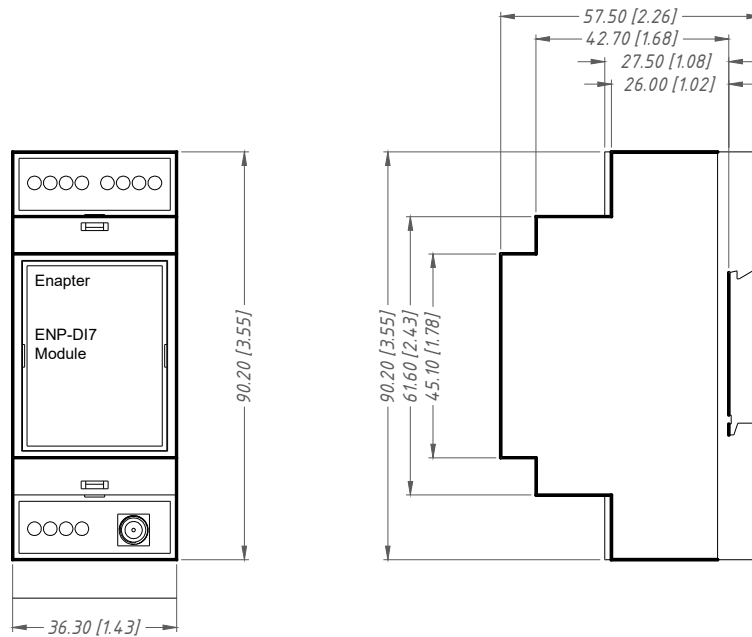
Type	Signal lamp Intermediate contactor and others
Number of connected devices	Up to 7
Connection	Screw terminal block
Galvanic isolation	Group, from controller circuits
Wet contact voltage	12 V
Dry contact voltage	12 – 24 V

Connected RS-485 device (optional)

Type	Inverter Ventilation system Valve Irradiance sensor Power meter and others
Voltage supply	9...24 V DC when module and RS-485 device powered from shared power supply
Connection	2-pin screw terminal block

Dimensions

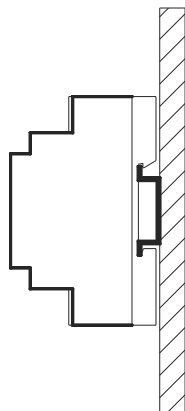
The dimensions are in mm and in brackets in inch.



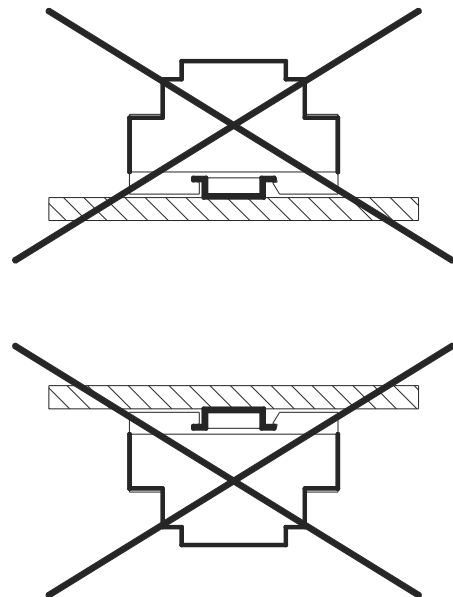
Mounting

The ENP-DI7 Module must be horizontally mounted on 35 mm DIN rail according to IEC 60715.

Correct Mounting Position

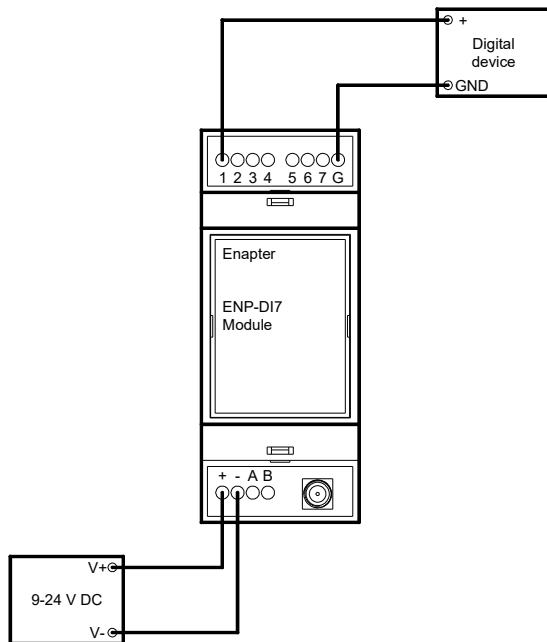


Incorrect Mounting Position



Connection Examples

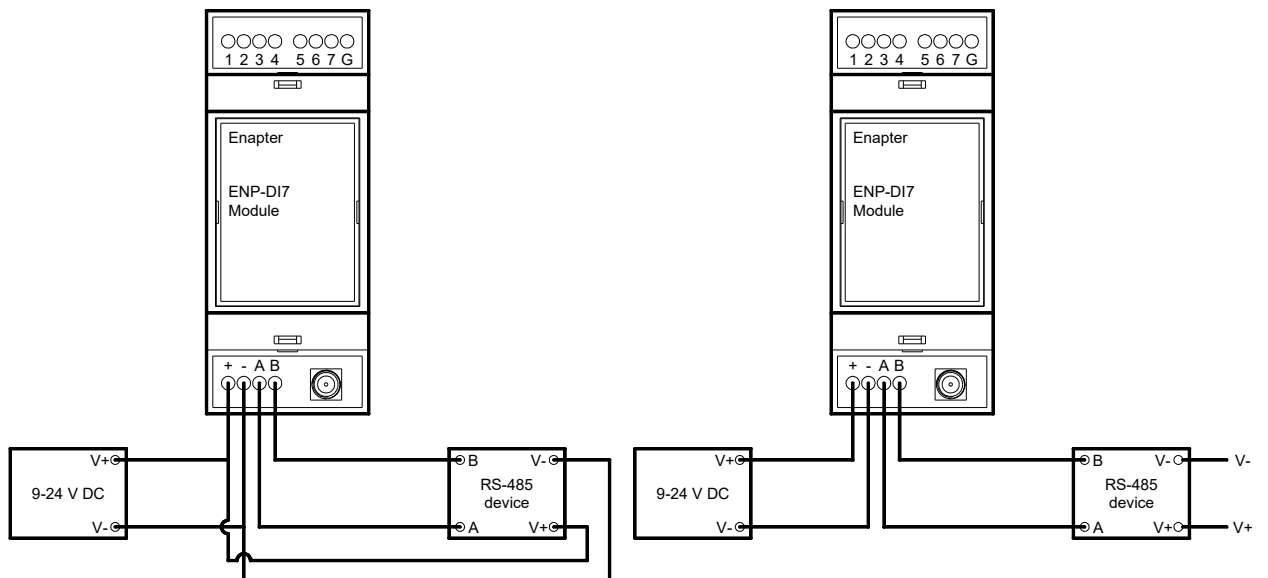
Module connected to Digital device.



Optional RS-485 Device connection.

Module and RS-485 device powered from shared power supply.

Module and RS-485 device powered from independent power supplies.



Note: 1 Amp Circuit Breaker recommended to use on power line for the ENP-DI7 Module.

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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