



## MODEL277 Series

Wall Mounting or DIN-Rail Mounting

1 RS-232/485/422 Serial-to-Fiber Modem

- Support 1 RS-232, RS-485/422 or 3IN1 serial port to 1 fiber port
- Support advanced communication coding and clock recovery technology to ensure accurate transmission of distant data
- Support unique "Zero time delay and automatic forwarding" technology
- Support autotuning technology of serial baud rate
- Support 5VDC, 12-48VDC, -48VDC and 220VAC four power supply solutions



## Introduction

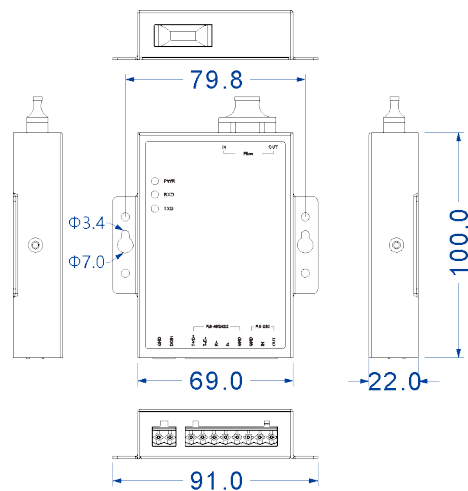
MODEL277 series are serial-to-fiber modems that convert RS-232/485/422 serial port signal to optical signal. This series include 3 types of optional products and support 1 RS-232, RS-485/422 or 3IN1 serial port to 1 fiber port. It adopts wall mounting or DIN-Rail mounting to meet the requirements of different application scenes.

This series adopt advanced communication coding and clock recovery technology to avoid data transmission error. And it adopts unique "Zero time delay and automatic forwarding" technology to enhance the anti-interference capability of interface and achieve real zero time delay. It can conduct automatic detection of baud rate, even the baud rate of the device serial signal changes; the converter can still achieve RS-232 or RS-485/422 to optical port conversion. MODEL277 series can be widely used in various industrial control, process control, traffic control, intelligent community and other scenes, especially suitable for bank, power industry, departments and systems with special requirements for electromagnetic interference.

## Dimension

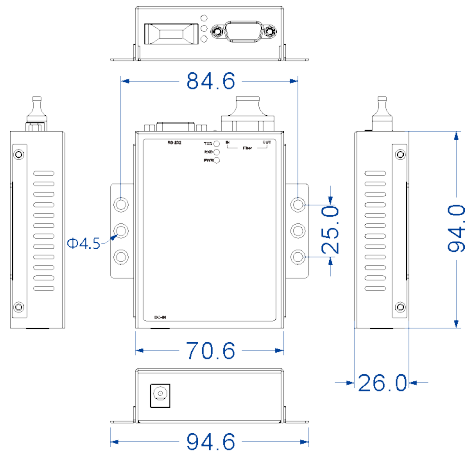
Unit: mm

- MODEL277 (12~48VDC)

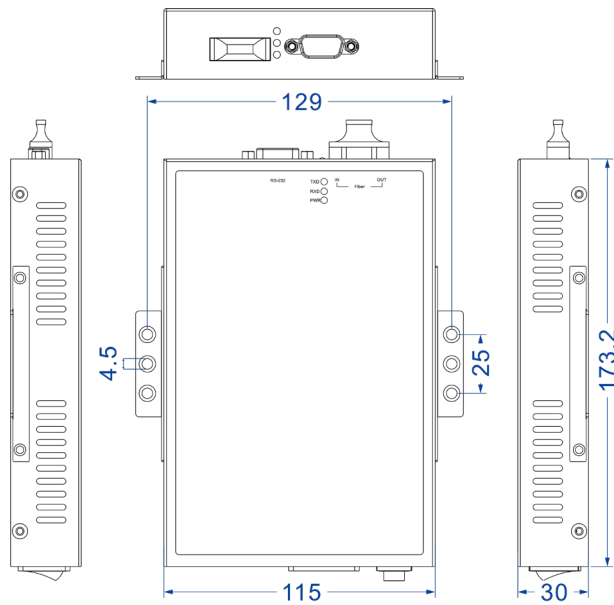


**12-48VDC**

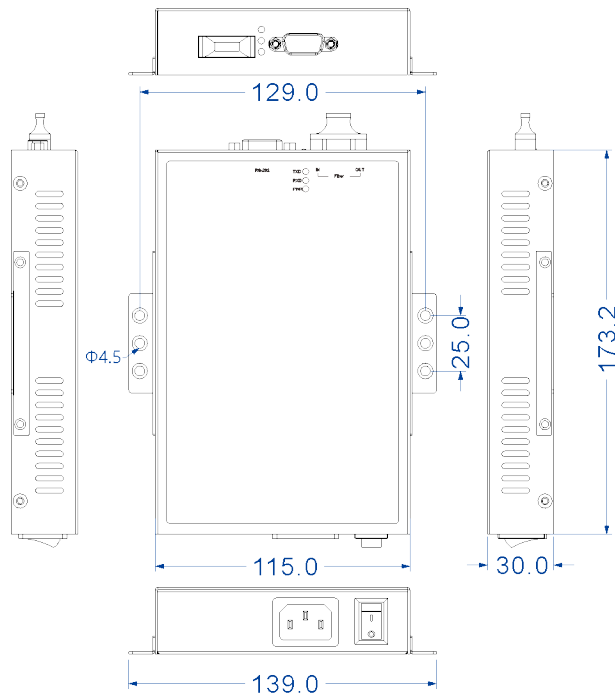
- MODEL277A (5VDC (external power supply), -48VDC and 220VAC)



5VDC

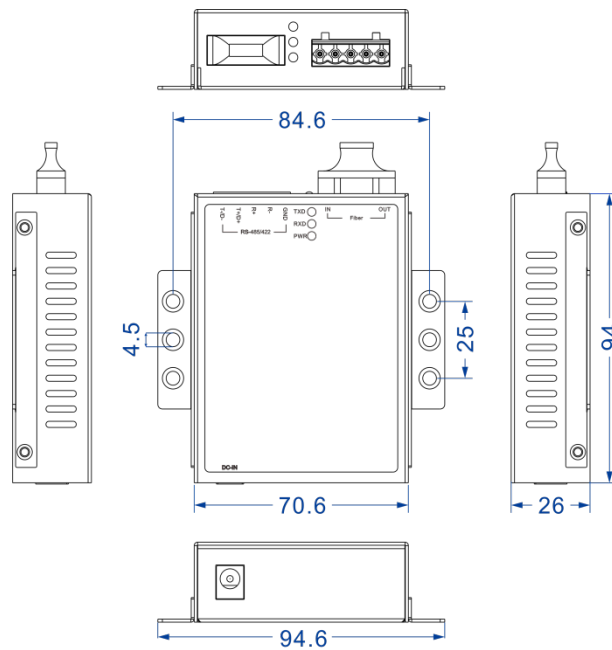


-48VDC



**220VAC**

- MODEL277B (5VDC (external power supply), -48VDC and 220VAC)



**5VDC**



# Specification

Fiber Interface	<p>Number of interfaces: 1</p> <p>Interface form: optional SC/ST/FC port</p> <p>Transmission distance:</p> <ul style="list-style-type: none"> <li>● Multimode: 2km</li> <li>● Single mode: 20/40/60/80/100/120Km</li> </ul> <p>Transmission wavelength:</p> <ul style="list-style-type: none"> <li>● Multimode: 1310nm</li> <li>● Single mode: 1310nm or 1550nm</li> </ul>
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Serial port	<p>Standards: EIA RS-232C, RS-485, RS-422</p> <p>Number of interfaces: Support 1 RS-232, RS-485/422 or 3IN1 serial port</p> <p>RS-232 signals: OUT, IN, GND</p> <p>RS-485 signals: D+, D-, GND</p> <p>RS-422 signals: T+, T-, GND, R+, R-</p> <p>Baud rate: 300bps-115200bps</p> <p>MODEL277 interface form: RS-232/485/422 serial port, adopts 8-pin 5.08mm pitch terminal blocks</p> <p>MODEL277A interface form: RS-232 serial port, DB9 female</p> <p>MODEL277B interface form: RS-485/422 serial port, adopts 5-pin 5.08mm pitch terminal blocks</p> <p>Direction control: RS-485 direction adopts ADDC (Automatic Data Direction Control) technology</p> <p>Load capacity: RS-485/422 end supports 64 points polling environment</p> <p>Transmission distance: RS-232, 15m; RS-485/422, 1200m</p> <p>RS-485 pull high/low resistor: 4.7kΩ</p>
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Indicator	Power supply indicator, fiber port data receiving and alarm indicator, fiber port data sending indicator
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Power supply	<p>MODEL277</p> <ul style="list-style-type: none"> <li>● Input power supply: 12~48VDC</li> <li>● Connection mode: 2-pin 5.08mm pitch terminal blocks</li> </ul> <p>MODEL277A, MODEL277B three optional power supply solutions</p> <ul style="list-style-type: none"> <li>● External power supply: 5VDC, adopts DC round head for connection, MODEL277B supports 2.0A overcurrent protection</li> <li>● Built-in power supply: -48VDC, adopts 3-pin 5.08mm pitch terminal blocks;</li> </ul>
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220VAC, adopts 3-hole AC socket with switch

<b>Environmental Limits</b>	MODEL277: <ul style="list-style-type: none"><li>● Operating temperature: -40 ~ 75°C</li><li>● Storage temperature: -40 ~ 75°C</li><li>● Relative humidity: 5%~95% (no condensation)</li></ul> MODEL277A, MODEL277B: <ul style="list-style-type: none"><li>● Operating temperature: -10~60°C</li><li>● Storage temperature: -40 ~ 85°C</li><li>● Relative humidity: 5% ~ 95% (no condensation)</li></ul>
<b>Mechanical structure</b>	Housing: IP30 protection grade, metal shell Installation: wall mounting or DIN-Rail mounting (DIN-Rail accessories should be purchased separately) MODEL277 dimension (W×H×D): 100mm×69mm×22mm  MODEL277A, MODEL277B dimension (W×H×D): <ul style="list-style-type: none"><li>● External power supply: 94mm×70.6mm×26mm</li><li>● Built-in power supply: 173.2mm×115mm×30mm</li></ul>
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	3 years

## Ordering Information

Optional models	Fiber port	RS-232	RS-485/422	3IN1 (RS-232/485/422)	Power supply
MODEL277	1	—	—	1	12 ~ 48VDC
MODEL277A	1	1	—	—	optional 5VDC, -48VDC or 220VAC
MODEL277B	1	—	1	—	



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