



IMF2100 Series

DIN-Rail Mounting

1/2 Optional Fiber Ports + 1 RS-232/485/422 Serial Port Optical MODEM

- Support 1/2 optical fiber interfaces and 1 RS-232/485/422 with isolated serial port
- Support one relay alarm output for power failure alarm and optical fiber disconnection alarm
- Support 12~48VDC dual power supply, 85~265VAC or 110~370VDC and other power supply schemes
- Support -40~75°C wide operating temperature range



Introduction

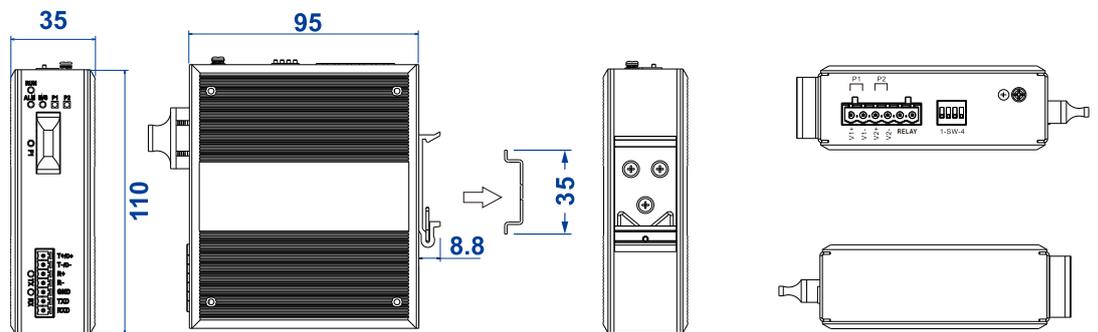
IMF2100 series are 1/2 optional fiber ports + 1 RS-232/485/422 serial port optical MODEMs, which convert RS-232/485/422 serial signal into optical signal, provide RS-232/485/422 serial port to users, and realize end-to-end transparent transmission. This series of products provide one or two optical fiber interfaces and one RS-232/485/422 serial port; The power supply supports 12~48VDC dual power supply, 110~370VDC or 85~265VAC (optional); 2 optical fiber interface products support ring network function. This series of products adopt DIN-Rail installation mode, which can meet the needs of different application sites.

The design of the DIP switch can realize the functions including master/slave ring network selection, RS-485 terminal resistance enable, relay power failure alarm and relay optical fiber disconnection alarm (Note: the power alarm function is only for dual power supply products). When the optical fiber disconnects or the dual power supply has failure, the ALM indicator will be bright and send out alarm, meanwhile, the alarm device connected to the relay will send out alarm for rapid scene troubleshooting. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can fit the industrial scene environment with harsh requirements for EMC. It can be widely used in various industrial control, process control, traffic control, intelligent community and other occasions, especially suitable for banks, electric power and departments and systems with special requirements for electromagnetic interference environment.

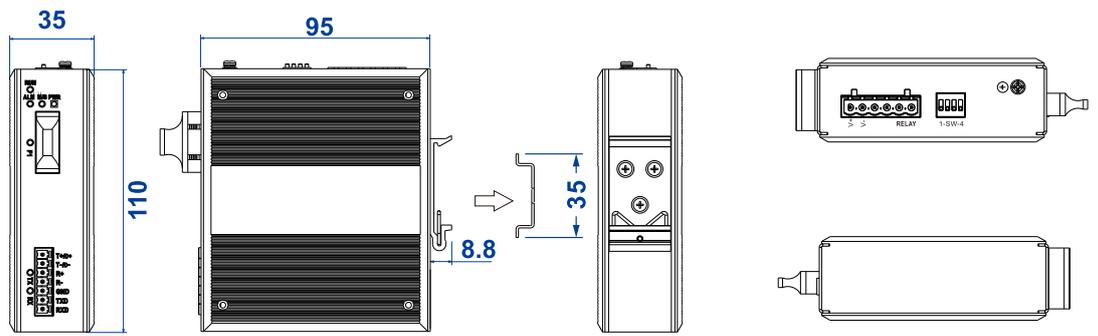
Dimension

Unit: mm

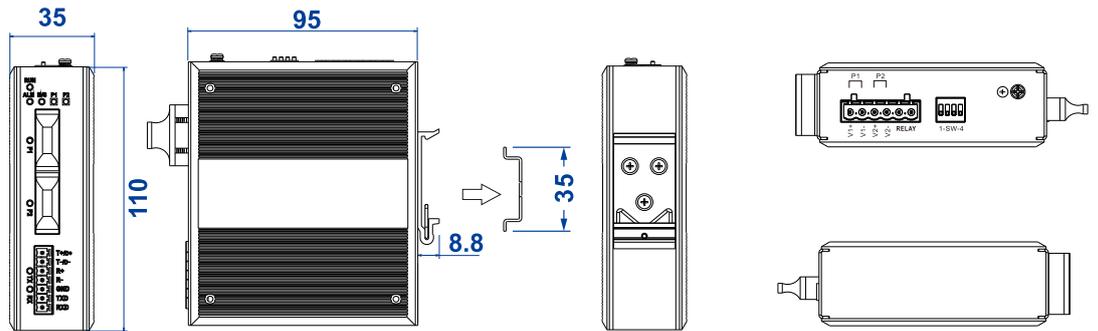
- IMF2100-1F-1DI(3IN1)-TB-2P(12-48VDC)



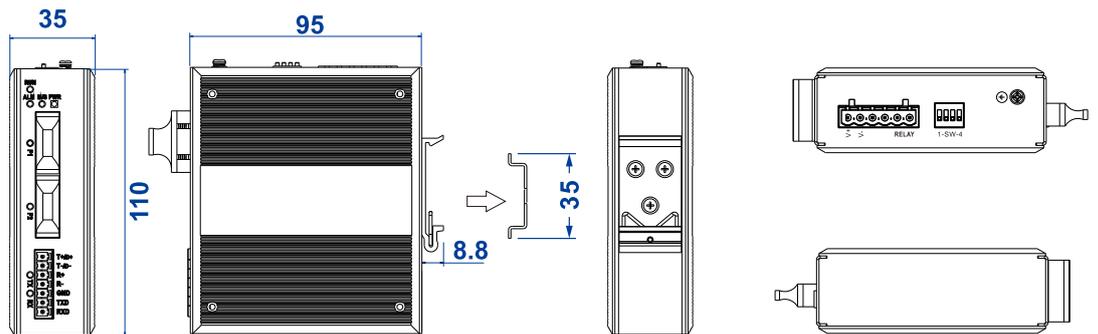
- IMF2100-1F-1DI(3IN1)-TB-P(85-265VAC)



- IMF2100-2F-1DI(3IN1)-TB-2P(12-48VDC)



- IMF2100-2F-1DI(3IN1)-TB-P(110-370VDC)、IMF2100-2F-1DI(3IN1)-TB-P(85-265VAC)



Specification

Fiber interface

Interface quantity: 1/2 (support ring network)

Interface form: optional SC/FC/ST interfaces

Transmission distance:

- multimode: 2km
- single mode: 20/40/60km

Transmission wavelength:

- multimode: 1310nm
- single mode: 1310nm or 1550nm

Serial Port

Standard: EIA RS-232C, RS-485, RS-422 standard

Serial ports: 1 RS-232/485/422 serial port (not available at the same

time)

RS-232 signal: RXD, TXD, GND

RS-485 signal: D+, D-, GND

RS-422 signal: T+, T-, GND, R+, R-

Baud rate: 300~115200bps

Data bit: 5bit, 6bit, 7bit, 8bit

Stop bit: 1bit, 1.5bit, 2bit

Parity bit: None, Even, Odd, Space, Mark

Interface form: 7-pin 3.81mm pitch terminal blocks

Directional control: RS-485 direction adopts Automatic Data Direction Control technology

Load capacity: RS-485 supports 32-point polling (customizable 128 points)

Pull high/low resistor for RS-485: 4.7kΩ

Terminating resistor for RS-485: internal 120Ω resistance controlled by DIP switch

Transmission distance: RS-232, 15m, RS-485/422 serial port, 1200m

Relay

Relay quantity: 1 relay alarm output

Connection method: 6-pin 5.08mm pitch terminal blocks (includes 2-pin relay)

Current load: 1A@30VDC, 0.3A@125VAC

Default relay state: normally open

Indicator

Power indicator, fiber port connection indicator, master/slave indicator, alarm indicator, serial port data receiving indicator, serial port data sending indicator

Power Supply

Support 3 optional power supply schemes: 12 ~ 48VDC (dual power supply), 110~370VDC or 85~265VAC

Scheme 1

- Voltage range: 12~48VDC
- Connection method: 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply)
- Power supply protection: non-polarity, built-in 2.0A overcurrent protection
- Power supply redundancy: support

Scheme 2

- Voltage range: 110~370VDC
- Connection method: 6-pin 5.08mm pitch terminal blocks (includes 2-pin power supply)
- Power supply protection: non-polarity, built-in 2.0A overcurrent protection

	<p>Scheme 3</p> <ul style="list-style-type: none">• The power supply range is 85~265VAC• Connection method: 6-pin 5.08mm pitch terminal blocks (includes 2-pin power supply)• Power supply protection: built-in 2.0A overcurrent protection
Power Consumption	<p>No-load: $\leq 3.0W@24VDC$ Full-load: $\leq 3.4W@24VDC$</p>
Working Environment	<p>Operating temperature: $-40\sim 75^{\circ}C$ Storage temperature: $-40\sim 85^{\circ}C$ Relative humidity: 5%~95% (no condensation)</p>
Physical Characteristic	<p>Housing: IP40 protection, metal Installation: DIN-Rail mounting Weight: $\leq 360g$ Dimension (W x H x D): 35mm×110mm×95mm</p>
Industrial Standard	<p>IEC 60950-1 / EN 60950-1: Safety EN 55032: Conducted & Radiated Disturbances IEC 61000-3-2 Harmonic Current Emission IEC 61000-3-3 Voltage Fluctuation & Flicker EN 55024 IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 61000-4-6 IEC 61000-4-8 IEC 61000-4-11</p>
Authentication	<p>CE, FCC, RoHS</p>

Ordering Information

Available Models	Fiber Port	RS-232/485/422	Power Supply
IMF2100-1F-1DI(3IN1)-TB-2P(12-48VDC)	1	1	12~48VDC (dual power supply)
IMF2100-2F-1DI(3IN1)-TB-2P(12-48VDC)	2	1	12~48VDC (dual power supply)
IMF2100-2F-1DI(3IN1)-TB-P(110-370VDC)	2	1	110~370VDC
IMF2100-1F-1DI(3IN1)-TB-P(85-265VAC)	1	1	85~265VAC
IMF2100-2F-1DI(3IN1)-TB-P(85-265VAC)	2	1	85~265VAC



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◀ Please scan our QR code for more details

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