

Wireless to Serial Communication Converters



SCM-WF48 CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Major Features

- Converting USB or RS485 signal to Wi-Fi signal, and wireless communication up to max. 100 m
- Compact size (W 48×H 25.6×L 76.3 mm, except antenna)
- Built-in surge protection circuit, reverse polarity protection circuit
- Supports AP mode and station mode
- Various mounting methods (DIN rail, panel)

Software

Download the installation file and the manuals from the Autonics website.

■ DAQMaster

It is the comprehensive device management program for Autonics' products, providing parameter setting, monitoring and data management.

Specifications

Model	SCM-WF48
Power supply	24 VDC=
Allowable voltage range	12 - 28 VDC=
Power consumption	≈ 3 W
Communication type	RS485, USB, WiFi
Isolation resistance	≥ 200 MΩ (at 500 VDC= megger between external terminal and case)
Protection circuit	Reverse polarity protection circuit, surge protection circuit
Dielectric strength	1,000 VAC~ 50/60 Hz for 1 min (between external terminal and case)
Noise immunity	± 500 VDC= the square wave noise (pulse width: 1μs) by the noise simulator
Vibration	1.5 mm amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours
Shock	500 m/s ² (≈ 50 G) in each X, Y, Z direction for 3 times
Ambient temperature	-10 to 55 °C, storage: -20 to 60 °C (no freezing or condensation)
Ambient humidity	35 to 80 %RH, storage: 35 to 80 %RH (no freezing or condensation)
Protection rating	IP20 (IEC standards)
Installation method	DIN rail or panel mounting
Accessory	USB 2.0 Mini B type cable (length: 1 m): 1, Connector for RS485 (4-pin, male type): 1
Indicator	Indicates state of mode
Approval	CE ENEC
Unit weight (packaged)	≈ 57 g (≈ 160 g)

Communication Interface

■ WiFi

Comm. protocol	TCP/IP (IPv4)
Application standard	802.11b/g/n (IEEE 802.11b) compatible
Comm. distance	≤ 100 m
Comm. speed	≤ 11 Mbps
Frequency range	2.4 to 2.497 GHz
Security	WEP, WPA, WPA2-PSK, Enterprise
Antenna	2dBi external antenna

■ RS485

Application standard	EIA RS485
Max. connection	≤ 31-unit
Comm. synchronous method	Asynchronous
Comm. method	2-wire half duplex
Comm. distance	≤ 800 m
Comm. speed ⁰¹⁾	4,800 / 9,600 (default) / 19,200 / 38,400 / 57,600 / 115,200 bps
Data bit	5 bit, 6 bit, 7 bit, 8 bit (default)
Parity bit	None (default), Even, Odd
Stop bit	1 bit (default), 2 bit
Connection type	4-wire screw terminal (2-wire communication method)

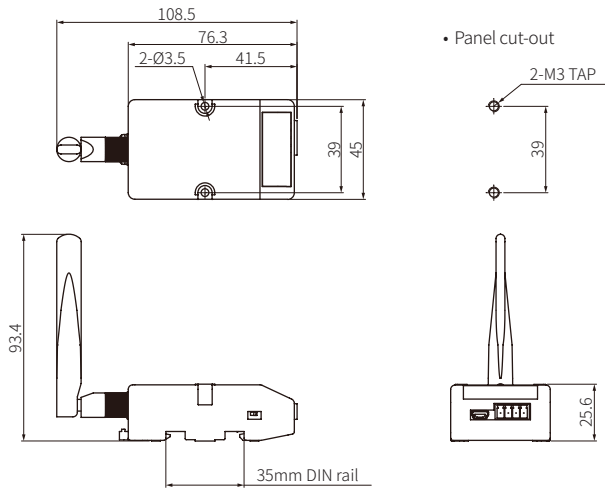
01) You can set via DAQMaster.

■ USB

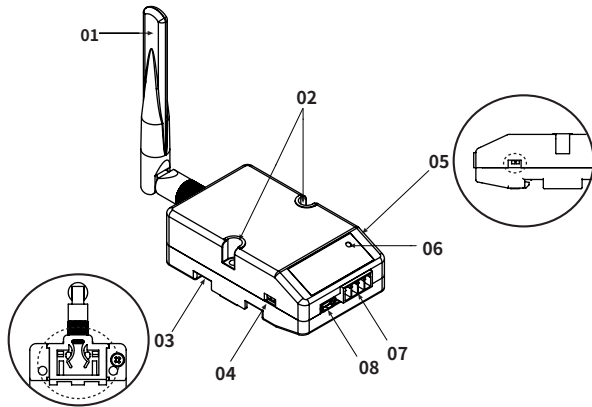
Power	5 VDC=, 500 mA
Application standard	USB 2.0 (compatible sub-transmission)
Comm. method	2-wire half duplex
Comm. distance	≤ 1 m ± 30%
Connection type	USB 2.0 Mini B type (male)

Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.



Unit Descriptions



- 01. WiFi antenna
- 02. Fixing screw hole
- 03. Rail Lock
- 04. Communication method switch (USB ↔ RS485)
- 05. Terminating resistance switch (RT ↔ OFF)
- 06. Indicator for modes
- 07. RS485 connector
- 08. USB connector