



Confidential
SMC Corporation

User Manual

PRODUCT NAME

Wireless Adaptor

Certificate Model

EXW1-A1

Product Number

*EXW1-A1***

SMC Corporation



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Caution

Notice:

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This device is authorized under Title 47 CFR 15.519 (the FCC Rules and Regulations).

The operation of this device is subject to the following restriction:

The changes or substitutions of the antennas which are furnished with the device is prohibited.

FCC ID : 2AJE7SMC-WEX08

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

 **Caution**

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

"Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil n' doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

"This Class B digital apparatus complies with Canadian ICES-003."

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

"This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter."

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur.

"This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body"

Cet équipement doit être installé et utilisé à une distance minimale de 20cm entre le radiateur et votre corps.

Introduction

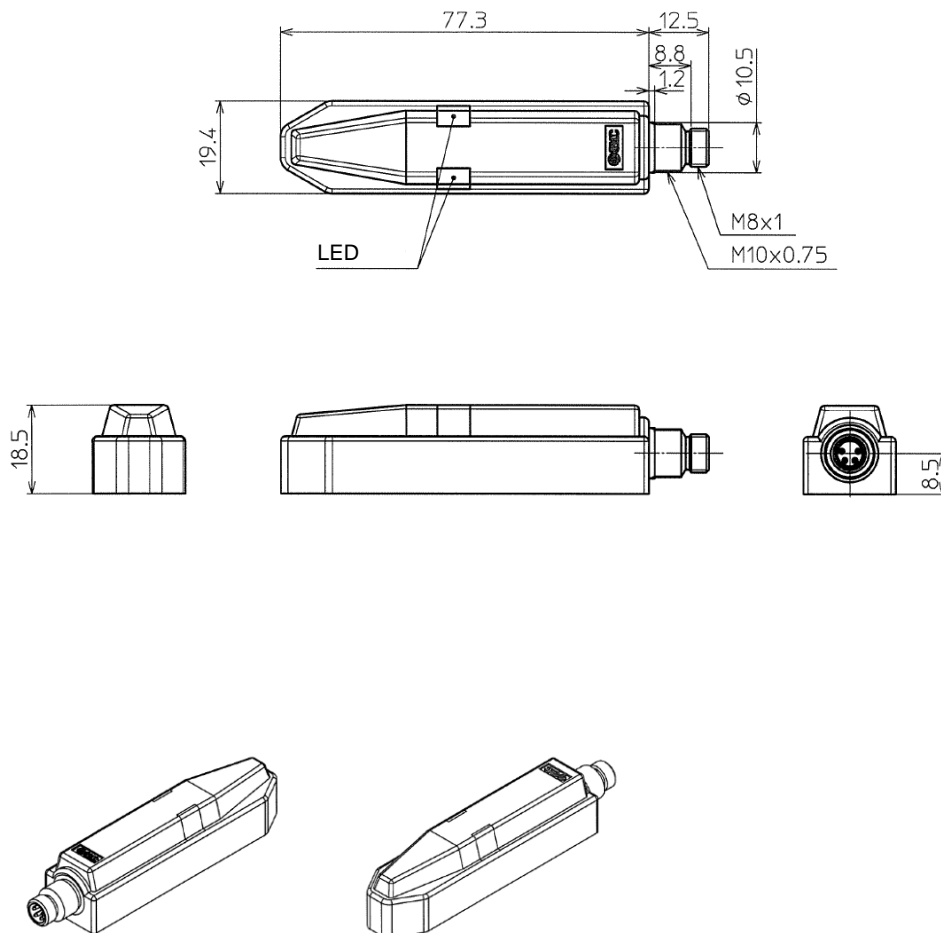
EXW1-A1 is a wireless adaptor which is equipped with 2.4GHz wireless communication capability. And this product has the RS485 interface for connection with SMC wireless Base/Remote units to communicate the input/output, diagnostic and other data.

The frequency hopping period and the data rate can be selected between 2ms(1000kbps) / 5ms(250kbps). Moreover, the frequency channel numbers can be selected from 15 to 79.

Lineup EXW1-A1

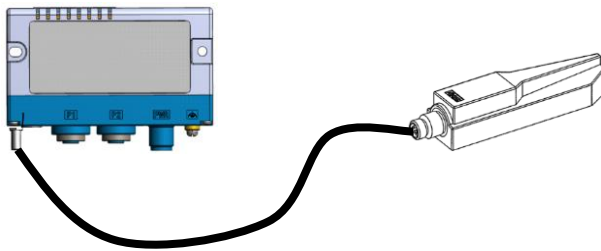
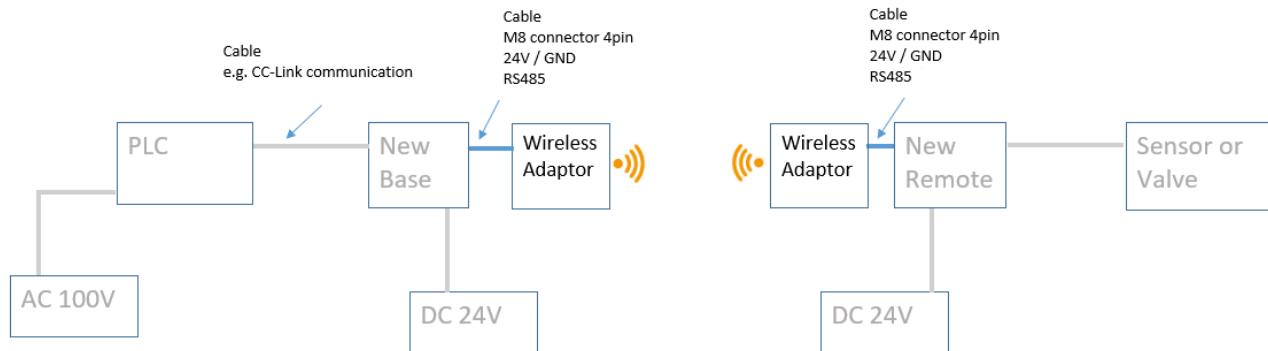
Product number	Hardware version	Wireless software version	Control software version
EXW1-A11N	Ver.1.0.0	Ver.1.0.0	Ver.1.0.0
EXW1-A12N	Ver.1.0.0	Ver.1.0.0	Ver.2.0.0
EXW1-A13N	Ver.1.0.0	Ver.1.0.0	Ver.3.0.0
EXW1-A11N-X1	Ver.1.0.0	Ver.1.0.0	Ver.4.0.0

External appearance



Connections with Base/Remote units

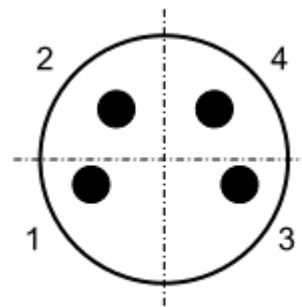
The wireless adaptor is connected to Base and Remote units via a cable.



Connector pin assignment

M8 4pin Connector

Pin No.	Description
1	24V
2	B (RS485)
3	0V
4	A (RS485)



Wireless Specification

Model	EXW1-A1
Product number	EXW1-A1*N
Frequency range	2.4GHz (2403MHz ~ 2481MHz)
Frequency Channel	79ch~15ch (ch separation min.1MHz)
Protocol	SMC original protocol
Encryption	SMC original encryption
Radio wave type	FHSS
Output level	20dBm eirp
CCA	Adaptive
Modulation	GFSK
Data Rate	1000kbps / 250 kbps
Deviation	250kHz (1000kbps) / 62.5kHz (250kbps)
Frequency hopping period	2ms(1000kbps) / 5ms(250kbps)
Antenna	Sleeve antenna (4.37dBi)

Product specification

Model	EXW1-A1
Product number	EXW1-A1*N
Wired interface	RS485
Wired data rate	Max. 2Mbps
Cable	Max. 2.95m
Communication distance	100m
Ambient operating temperature	-10 to +50°C
Ambient storage temperature	-20 to +60°C
Ambient humidity	35 to 85% RH (no condensation)
Power supply voltage	12~24 VDC \pm 10%
Current consumption	50m A



Revision history

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Note: Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.
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