



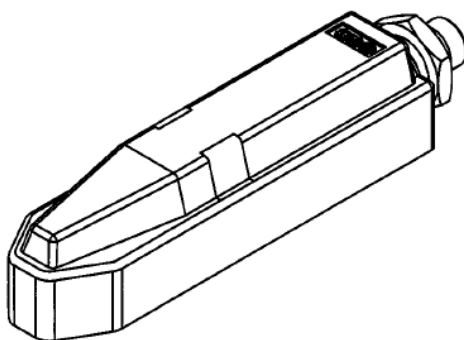
Operation Manual

PRODUCT NAME

Wireless Adaptor

MODEL / Series / Product Number

EXW1-A11#



SMC Corporation

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Safety Instructions

These safety instructions are intended to prevent hazardous situations and/or equipment damage. These instructions indicate the level of potential hazard with the labels of “**Caution**,” “**Warning**” or “**Danger**.” They are all important notes for safety and must be followed in addition to International Standards (ISO/IEC)^{*1)}, and other safety regulations.

*1) ISO 4414: Pneumatic fluid power - General rules and safety requirements for systems and their components
ISO 4413: Hydraulic fluid power - General rules and safety requirements for systems and their components
IEC 60204-1: Safety of machinery - Electrical equipment of machines - Part 1: General requirements
ISO 10218-1: Robots and robotic devices - Safety requirements for industrial robots - Part 1: Robots
etc.



Danger

Danger indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.



Warning

Warning indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.



Caution

Caution indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.



Warning

1. The compatibility of the product is the responsibility of the person who designs the equipment or decides its specifications.

Since the product specified here is used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results. The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product. This person should also continuously review all specifications of the product referring to its latest catalog information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

2. Only personnel with appropriate training should operate machinery and equipment.

The product specified here may become unsafe if handled incorrectly. The assembly, operation and maintenance of machines or equipment including our products must be performed by an operator who is appropriately trained and experienced.

3. Do not service or attempt to remove product and machinery/equipment until safety is confirmed.

1. The inspection and maintenance of machinery/equipment should only be performed after measures to prevent falling or runaway of the driven objects have been confirmed.
2. When the product is to be removed, confirm that the safety measures as mentioned above are implemented and the power from any appropriate source is cut, and read and understand the specific product precautions of all relevant products carefully.
3. Before machinery/equipment is restarted, take measures to prevent unexpected operation and malfunction.

4. Our products cannot be used beyond their specifications. Our products are not developed, designed, and manufactured to be used under the following conditions or environments. Use under such conditions or environments is not covered.

1. Conditions and environments outside of the given specifications, or use outdoors or in a place exposed to direct sunlight.
2. Use for nuclear power, railways, aviation, space equipment, ships, vehicles, military application, equipment affecting human life, body, and property, fuel equipment, entertainment equipment, emergency shut-off circuits, press clutches, brake circuits, safety equipment, etc., and use for applications that do not conform to standard specifications such as catalogs and operation manuals.
3. Use for interlock circuits, except for use with double interlock such as installing a mechanical protection function in case of failure. Please periodically inspect the product to confirm that the product is operating properly.



Safety Instructions

Caution

We develop, design, and manufacture our products to be used for automatic control equipment, and provide them for peaceful use in manufacturing industries.

Use in non-manufacturing industries is not covered.

Products we manufacture and sell cannot be used for the purpose of transactions or certification specified in the Measurement Act.

The new Measurement Act prohibits use of any unit other than SI units in Japan.

Limited warranty and Disclaimer/Compliance Requirements

The product used is subject to the following “Limited warranty and Disclaimer” and “Compliance Requirements”.

Read and accept them before using the product.

Limited warranty and Disclaimer

1. The warranty period of the product is 1 year in service or 1.5 years after the product is delivered, whichever is first.*2)

Also, the product may have specified durability, running distance or replacement parts. Please consult your nearest sales branch.

2. For any failure or damage reported within the warranty period which is clearly our responsibility, a replacement product or necessary parts will be provided.

This limited warranty applies only to our product independently, and not to any other damage incurred due to the failure of the product.

3. Prior to using SMC products, please read and understand the warranty terms and disclaimers noted in the specified catalog for the particular products.

***2) Vacuum pads are excluded from this 1 year warranty.**

A vacuum pad is a consumable part, so it is warranted for a year after it is delivered.

Also, even within the warranty period, the wear of a product due to the use of the vacuum pad or failure due to the deterioration of rubber material are not covered by the limited warranty

Compliance Requirements

1. The use of SMC products with production equipment for the manufacture of weapons of mass destruction (WMD) or any other weapon is strictly prohibited.

2. The exports of SMC products or technology from one country to another are governed by the relevant security laws and regulations of the countries involved in the transaction. Prior to the shipment of a SMC product to another country, assure that all local rules governing that export are known and followed.

Operator

- ◆ This operation manual is intended for those who have knowledge of machinery using pneumatic equipment, and have sufficient knowledge of assembly, operation and maintenance of such equipment. Only those persons are allowed to perform assembly, operation and maintenance.
- ◆ Read and understand this operation manual carefully before assembling, operating or providing maintenance to the product.

■ Safety Instructions

Warning

- Do not disassemble, modify (including changing the printed circuit board) or repair.
An injury or failure can result.
- Do not operate or set with wet hands.
This may lead to an electric shock.
- Do not operate the product outside of the specifications.
Do not use for flammable or harmful fluids.
Fire, malfunction, or damage to the product can result.
Verify the specifications before use.
- Do not operate in an atmosphere containing flammable or explosive gases.
Fire or an explosion can result.
This product is not designed to be explosion proof.
- If using the product in an interlocking circuit:
 - Provide a double interlocking system, for example a mechanical system.
 - Check the product regularly for proper operation.Otherwise malfunction can result, causing an accident.
- The following instructions must be followed during maintenance:
 - Turn off the power supply.
 - Stop the air supply, exhaust the residual pressure and verify that the air is released before performing maintenance.Otherwise an injury can result.

Caution

- When handling the unit or assembling/replacing units:
 - Do not touch the sharp metal parts of the connector or plug for connecting units.
 - Take care not to hit your hand when disassembling the unit.
The connecting portions of the unit are firmly joined with seals.
 - When joining units, take care not to get fingers caught between units.
An injury can result.

- After maintenance is complete, perform appropriate functional inspections.
Stop operation if the equipment does not function properly.
Safety cannot be assured in the case of unexpected malfunction.

- Provide grounding to assure noise resistance of the Wireless system.
Individual grounding should be provided close to the product with a short cable.

Fieldbus system/Industrial IoT Security Measures

With the introduction of Industrial IoT, various devices in a factory are connected to the network, and it is necessary to respond to new threats such as cyber-attacks. To protect Industrial IoT, it is important to take multilayered countermeasures (multilayer defense) that include IoT devices, networks, and cloud computing. SMC recommends that the following countermeasures be considered. For details on the measures listed, please refer to the security measures documents and other documents issued by each country and organization.

(1) Do not connect devices to public networks such as the Internet.

If it is necessary to access equipment or the cloud through a public network, use a secure line such as a VPN or leased line.

Do not connect information networks such as offices to industrial IoT networks in factories.

(2) Install firewalls to prevent external threats from entering devices and systems.

Install routers and firewalls at network boundaries and set them to allow only the minimum necessary communication.

If a permanent connection is not required, disconnect the line by turning off communication devices when not in use.

(3) Make unused communication ports physically inaccessible or disable them in the configuration.

Check each port regularly to see if there are any unnecessary devices connected to the network equipment.

For various services (SSH, FTP, SFTP, etc.) of network devices, configure them to run only the necessary services.

Wireless LAN and other devices that use radio waves should be configured to have an appropriate propagation range and use appropriate devices that have been certified by the radio wave laws of the country in which they are installed.

Install equipment that outputs radio waves in a location where there is no interference from outside or inside the building.

(4) Set up a communication method with security measures such as data encryption.

Implement security measures with cryptographic functions in each environment, such as IoT networks and connections via secure gateways.

(5) Grant access privileges to each account and limit the number of users who can use the account.

Periodically review accounts and delete unused accounts and privileges.

If the number of login errors exceeds a certain threshold, set up an account lock mechanism, such as prohibiting the use of the account for a certain period of time.

(6) Protect passwords.

The initial passwords should be changed at the time of installation.

Change passwords on a regular basis.

The password should be a combination of characters that is difficult to guess and highly secure (e.g., 8 or more characters, including letters and special characters).

(7) Use the latest security software.

Install antivirus software on all PCs to detect and eliminate virus infection.

Anti-virus software should always be kept up-to-date.

(8) Keep the latest versions of equipment and system software.

Apply patches to keep OS and applications up-to-date.

(9) Monitor and detect abnormalities in the network.

In the event of an abnormality, monitor communications within the network and notify an alert when an abnormality is detected in order to promptly respond to the problem. Install devices such as intrusion detection/protection systems (IDS/IPS).

(10) Delete data when disposing of or relinquishing equipment.

When disposing of IoT devices, data deletion or physical destruction should be performed to prevent unauthorized use of data left on the devices.

■Precautions regarding the Radio Law

EXW1-A1 Series

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 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.

"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.

NCC 警語

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

"Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados"

"Para maiores informações, consulte o site da ANATEL – www.anatel.gov.br"

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

■ Precautions for Handling

○ Follow the instructions given below for selecting and handling.

- The instructions on design and selection (installation, wiring, environment, adjustment, operation, maintenance, etc.) described below must be followed.

*Product specifications

- Use within the specified voltage.
Otherwise failure or malfunction can result.
- Reserve a space for maintenance.
Design the system to allow the required space for maintenance.
- Do not remove the label.
This can lead to incorrect maintenance, or misreading of the operation manual, which can cause damage or malfunction to the product.
It may also result in nonconformity to safety standards.
- Beware of inrush current when the power supply is turned on.
An initial charge current may activate the over current protection function depending on the connected load, resulting in the unit malfunctioning.

● Product Handling

*Mounting

- Do not drop, hit or apply excessive shock to the product.
Otherwise damage to the internal parts can result, causing malfunction.
- Tighten to the specified tightening torque.
If the tightening torque is exceeded, the mounting screws can be broken.
If the screws are tightened to a different torque, IP67 will not be achieved.
- Never mount the product in a location that will be used as a foothold.
The product may be damaged if excessive force is applied by stepping or climbing onto it.

*Wiring (Including connecting/disconnecting of the connectors)

- Avoid bending or stretching the cables repeatedly, or placing a heavy load or apply force to the product.
Applying repeated bending and tensile stress to the cable may cause broken wires.
- Wire correctly.
Incorrect wiring may cause malfunction of or damage to the wireless system.
- Do not perform wiring while the power is on.
Otherwise the wireless system may be damaged or malfunction.
- Do not route wires and cables together with power or high voltage cables.
The product can malfunction due to interference of noise and surge voltage from power and high voltage cables close to the signal line.
Route the wires of the wireless system separately from power or high voltage cables.
- Confirm correct insulation of wiring.
Poor insulation (interference with other circuits, poor insulation between terminals, etc.) can apply excessive voltage or current to the wireless system causing damage to it.
- When a wireless system is installed in machinery/equipment, provide adequate protection against noise by using noise filters, etc.
Noise in signal lines may cause malfunction.

*Operating environment

- Select the correct type of enclosure according to the operating environment.
 - IP67 protection class is achieved when the following conditions are met.
 - The units are connected correctly using cables with M8 connectors.
 - If using in an environment that is exposed to water splashes, please take protective measures, such as using a cover.
 - Do not use in an atmosphere having water, water steam, or where there is direct contact with any of these. These may cause failure or malfunction.
- Do not use the product in a place where the product could be splashed by oil or chemicals.
 - Operating in environments with coolants, cleaning solvents, various oils or chemicals may cause adverse effects (failure, malfunction) to the unit even in a short period of time.
- Do not use the product in an environment where corrosive gases or fluids can be splashed.
 - Otherwise damage to the unit can result, causing malfunction.
- Do not use in an area where surges are generated.
 - If there is equipment generating large surge near the unit (magnetic type lifter, high frequency inductive furnace, welding machine, motor, etc.), this can cause deterioration of the internal circuitry element of the unit or result in damage. Take measures against the surge sources, and prevent the lines from coming into close contact.
- When a surge-generating load such as a relay, valve, or lamp is directly driven, use the product with built in surge protection.
 - Direct drive of a load generating surge voltage can damage the unit.
- The product is CE marked, but is not immune to lightning strikes. Take measures against lightning strikes in the system.
- Prevent foreign matter such as dust or wire debris from entering inside the product.
 - Otherwise it can cause damage or malfunction.
- Mount the product in a place that is not exposed to vibration or impact.
 - Otherwise it can cause damage or malfunction.
- Do not use the product in an environment that is exposed to temperature cycles.
 - Heat cycles other than ordinary changes in temperature can adversely affect the inside of the product.
- Do not expose the product to direct sunlight.
 - If using in a location directly exposed to sunlight, shade the product from the sunlight.
 - Otherwise it can cause damage or malfunction.
- Keep within the specified ambient temperature range.
 - Otherwise malfunction can result.

- Do not operate close to a heat source, or in a location exposed to radiant heat.
 - Otherwise malfunction can result.

*Maintenance

- Turn off the power supply, stop the supplied air, exhaust the residual pressure and verify the release of air, before performing maintenance.
 - Otherwise safety is not assured due to an unexpected malfunction or incorrect operation.
- Perform regular maintenance and inspections.
 - There is a risk of unexpected operation due to malfunction of the equipment.
- After maintenance is complete, perform appropriate functional inspections.
 - Stop operation if the equipment does not function correctly.
 - Otherwise safety cannot be assured due to an unexpected malfunction or incorrect operation.
- Do not use solvents such as benzene, thinner, etc. to clean each unit.
 - These can damage the surface of the body and erase the markings on the product.
 - Use a soft cloth to remove stains.
 - For heavy stains, use a damp cloth that has been soaked with diluted neutral detergent and fully squeezed, then wipe up the stains again with a dry cloth.

Important Instructions concerning the Wireless System

- This product is connected to a Wireless System or an Air Management System.
- The product is certified as wireless equipment in accordance with the Radio Act and the certification of construction type has been obtained. Customers do not need to apply for a license to use this equipment.
Be sure to comply with the following precautions.
 - Do not disassemble or modify the product. Disassembly and modification are prohibited by law.
 - This product is compliant with the Radio Act in Japan, European countries and the US. For the latest information, refer to the catalog on the website below.
URL <https://www.smcworld.com>
- This product communicates using radio waves, and the communication may be temporarily interrupted due to the ambient environments and operating methods. SMC will not be responsible for any secondary failure which may cause an accident or cause damage to other devices or equipment.
- When several units are installed close to each other, slight interference may occur due to the characteristics of the wireless product.
- Radio waves emitted by this product may adversely affect implantable medical devices such as implantable cardiac pacemakers and brillators.
For precautions regarding the use of equipment or devices that may adversely affect performance, refer to the catalog or instruction manuals for the equipment or devices, or contact the manufacturers directly.
- The communication performance is affected by the ambient environment, so please perform communication testing before use.

SMC Wireless System

Features and Summary

SMC Wireless Products, such as the Air Management System, EX600-W and EXW1 series products, are modular devices consisting of a gateway (hereafter referred to as a Base) and wireless devices (hereafter referred to as Remotes). The Base has the function to communicate with an upper-level device (PLC) and paired Remotes. From the upper-level device point of view, the wireless network acts a single modular device through the Base.

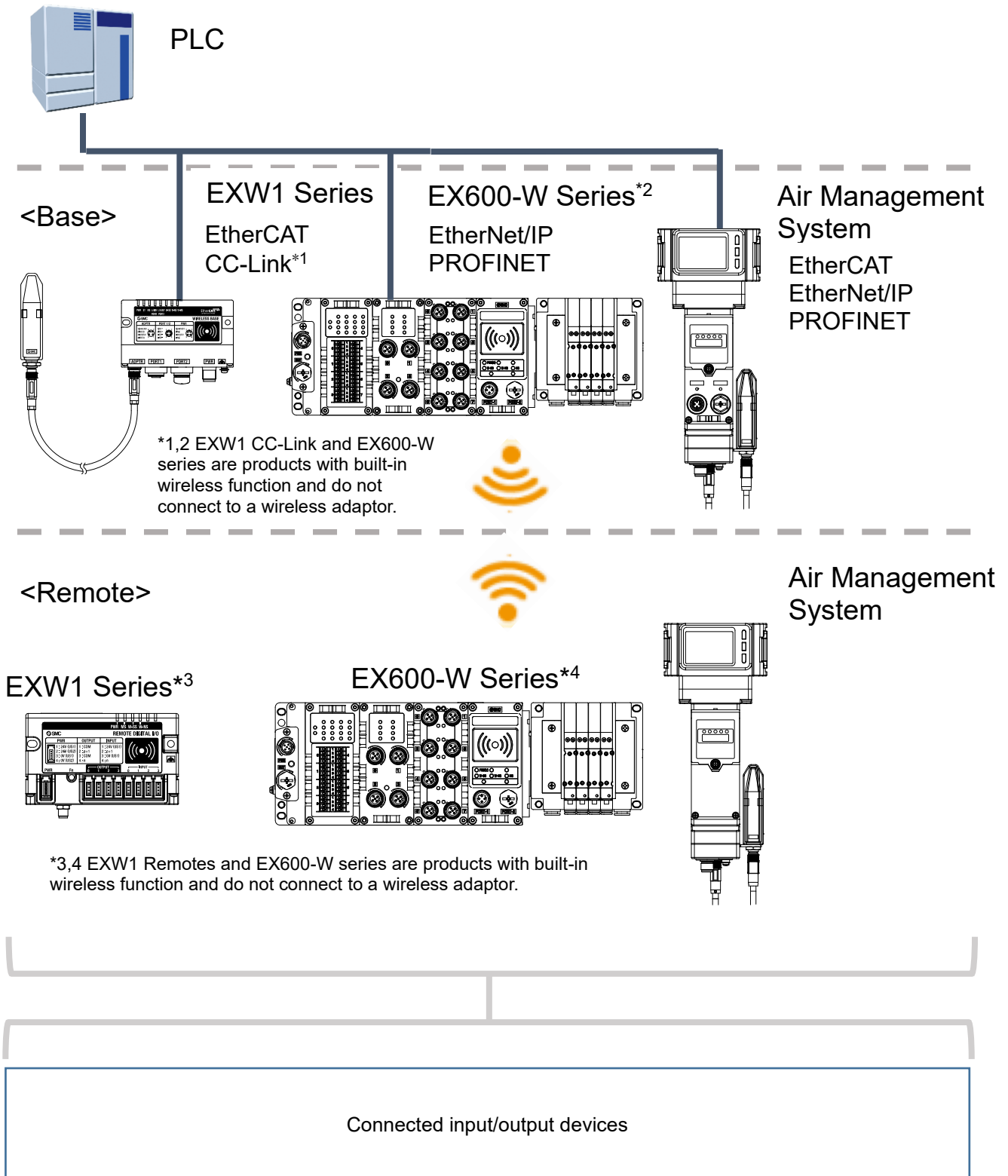
The Wireless Adaptor is the product that handles the wireless communication between Base and Remotes that do not have built-in wireless modules. The same wireless adaptor can be used for both Bases and Remotes and is connected via a cable.

Bases and Remotes are designed to be identifiable by registering their uniquely assigned PIDs (Product IDs) with each other and therefore function without conflicts even when several Bases and Remotes operate in the same area. The wireless adaptor does not have an assigned PID; it uses the PID of the device it is connected to via the cable.

The packet of the wireless transmit and receive data is encrypted. It is therefore difficult to manipulate the data.

For more information on wireless systems and air management systems, please refer to the wireless system and air management system manuals.

System Configuration

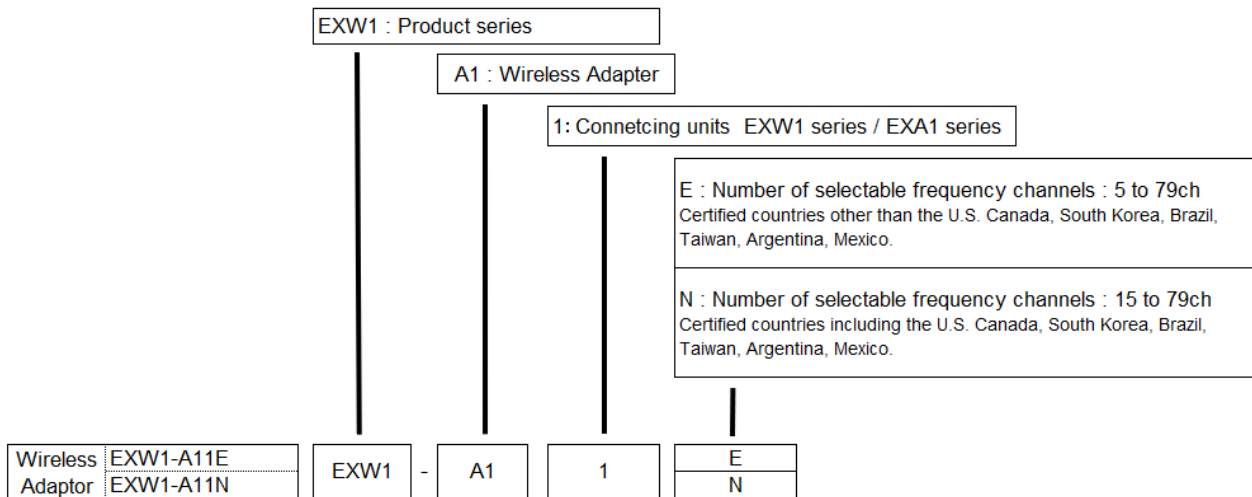


For settings and other information, refer to the operation manuals for Wireless System and Air Management System.

How to Order

<Wireless Adaptor>

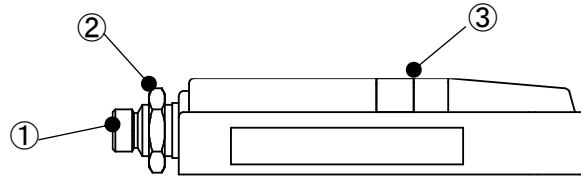
This product line-up consists of EXW1-A11E, EXW1-A11N.



Summary of Product parts

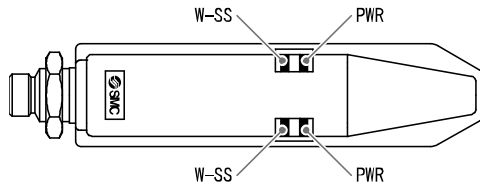
EXW1-A11*

Appearance



No.	Name	Application
1	Connector	Connector for Wireless Adaptor cable.
2	Nut	For fixing to Air Management system.
3	LED display	Indicates the status of the adaptor.

LED



LED name	Function	LED status		Description
		Colour of LED	ON/Flashing	
PWR	Status indication	Green	ON	US1 (for control) power supply is ON.
		Orange	Flashing	Internal Bus error is detected.
		Red	ON	Unrecoverable error is detected.
		-	OFF	US1 (for control) power supply is OFF.
W-SS	Received signal strength indicator	Green	ON	The level of received radio wave power is 3.
		Green	Flashing (1 Hz)	The level of received radio wave power is 2.
		Green	Flashing (2 Hz)	The level of received radio wave power is 1.
		Red	Flashing	All the Remotes or the Base that support protocol V.1.0 are not connected.
		Orange	Flashing	All the Remotes or the Base that support protocol V.2.0 are not connected.
		-	OFF	Not registered.

Connectors

No.	Signal	M8, 4-pin, Plug
1	24V (US1)	
2	Internal BUS B	
3	0V (US1)	
4	Internal BUS A	

Mounting and Installation of Units

EXW1-A11*

■ Mounting to the Wireless System

⚠ Caution

- To avoid damage to parts, apply the recommended tightening torque.

● Flat surface mounting

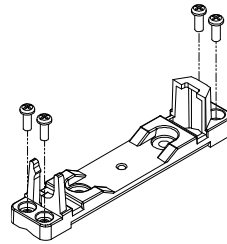
(1) Attachment of installation plate

Attach the installation plate to the target object by either of the following two methods.

Installation with M3 x 4 positions

The tightening torque should be $0.4\text{N} \cdot \text{m} \pm 10\%$.

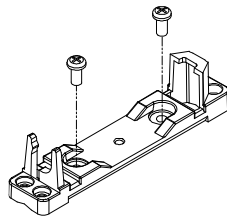
(Mounting screws are not included.)



Installation with M4 x 2 positions

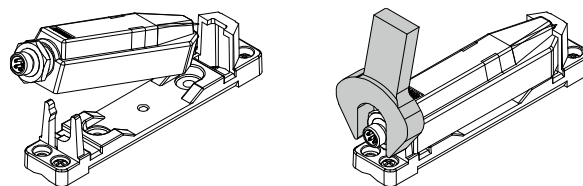
The tightening torque should be $0.6\text{N} \cdot \text{m} \pm 10\%$.

(Mounting screws are not included.)



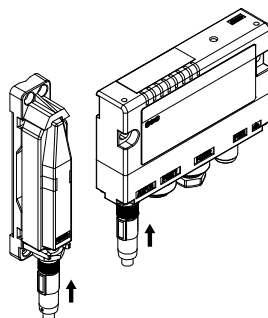
(2) Installation of wireless adaptor

Clip the wireless adaptor onto the installation plate as shown below and secure the adaptor in place using the M10 nut already fitted to the wireless adaptor. The tightening torque should be $0.9\text{N} \cdot \text{m} \pm 10\%$.



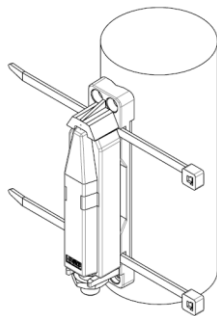
(3) Connection of the cable for wireless adaptor

Connect the cable to the base and the wireless adaptor.

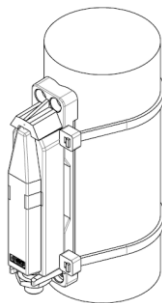


●Curved surface mounting

(1) Thread the top and bottom cable ties through the installation plate.

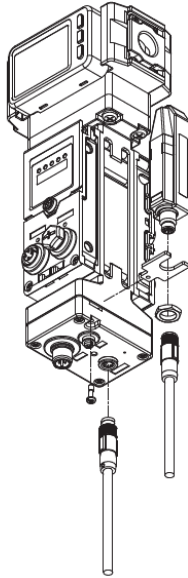


(2) Secure the wireless adaptor to the mount by tightening the cable ties. Trim back the loose ends of the cable ties.

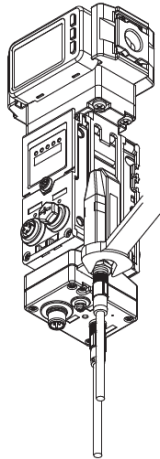


■ Mounting to the Air Management System

Mount the wireless adaptor bracket to the Air Management System using the screw attached to the Air Management System. (Recommended torque: $0.3 \pm 10\%$ N · m)
Then attach the cable EXW1-AC1-X1 to the wireless adaptor and Air Management System.



Mount the adaptor to the bracket of the Air Management system using the M10 nut already installed to the wireless adaptor. (Recommended torque: $0.9 \pm 10\%$ N · m)



Caution

The EXW1-AC1-X1 which is the optional cable should be used for connection to the Wireless system and Air Management System.

Troubleshooting

When problems occur, take appropriate countermeasures while referring to the LED indication, troubleshooting and parameter settings.

If a cause applicable to the failure cannot be identified, this indicates that the equipment itself is broken. The wireless adaptor damage can be caused by the operating environment. Contact SMC to obtain countermeasures.

•Wireless Adaptor troubleshooting items

LED	Description	LED status		No.
		Colour of LED	ON/Flashing	
-	All LEDs are OFF.	-	-	Problem 1
PWR	PWR LED is red or flashes orange or is off.	-	OFF	Problem 2
		Orange	Flashing	
		Red	ON	
W-SS	W-SS LED flashes red or orange or is off.	Red	Flashing	Problem 3
		Orange	Flashing	
		-	OFF	

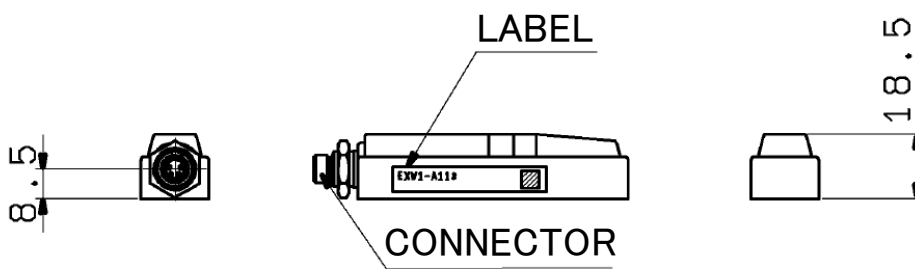
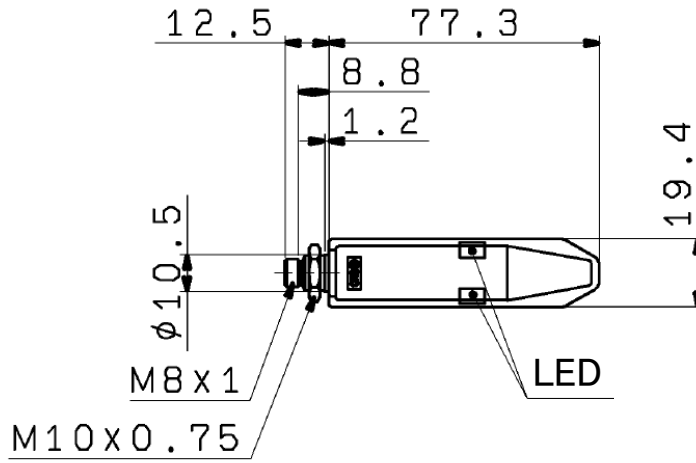
•Wireless Adaptor troubleshooting

Problem No.	LED name	LED status		Possible causes	Investigation and countermeasures
		Colour of LED	ON/Flashing		
1	All	-	OFF	(1) Cable connection failure. (2) The US1 (for control) power supply is OFF.	(1) Check for loose connectors and broken wires. (2) Supply 24 VDC +/-10% to the US1 (for control / input) power source of the connected Base or Remote.
2	PWR	-	OFF	(1) Cable connection failure. (2) The US1 (for control) power supply is OFF.	(1) Check for loose connectors and broken wires. (2) Supply 24 VDC +/-10% to the US1 (for control / input) power source of the connected Base or Remote.
		Orange	Flashing	Internal communication error with the wireless adaptor.	Check for loose connectors and broken wires.
		Red	ON	Wireless Adaptor malfunction.	Replace the Wireless Adaptor. If the error persists after replacement, stop using the equipment and contact your SMC sales representative.
4	W-SS	Red	Flashing	When Protocol V.1.0 is used. (1) Power supply of registered Base or all Remotes are OFF. (2) Outside the wireless coverage area.	(1) Supply 24 VDC +/-10% to the US1 (for control / input) power source of the registered Base or Remotes. (2) The distance which wireless communication between wireless systems can be established may have been exceeded. Reconsider the operating environment, such as the installation conditions, of the Base and Remote.
		Orange	Flashing	When Protocol V.2.0 is used. (1) Power supply of registered Base or all Remotes are OFF. (2) Outside the wireless coverage area.	(1) Supply 24 VDC +/-10% to the US1 (for control / input) power source of the registered Base or Remotes. (2) The distance which wireless communication between wireless systems can be established may have been exceeded. Reconsider the operating environment, such as the installation conditions, of the Base and Remote.
		-	OFF	Not registered.	Check the registration status of the Base or Remotes and perform pairing correctly.

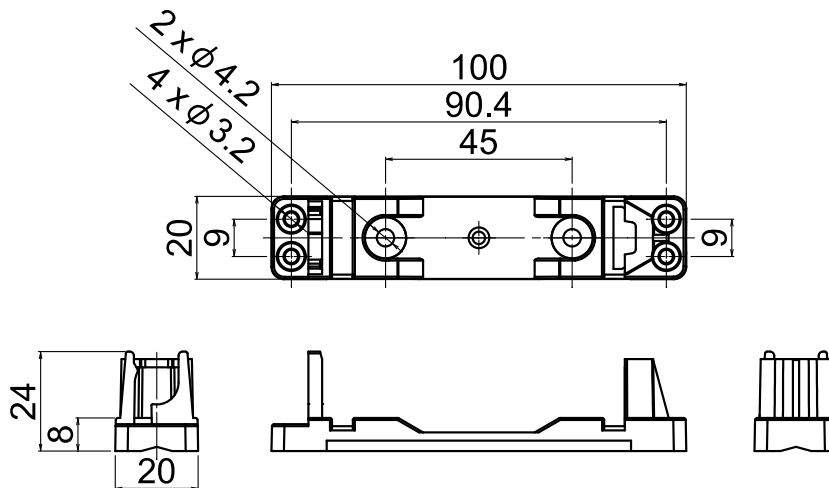
Specifications

Dimensions

oWireless Adaptor



oInstallation Plate



Specifications Table

○EXW1-A11*

Electrical specifications

Item	Specification
US1 (for control) power supply voltage range	24 VDC+/-10 %
Current consumption	50 mA or less

General specifications

Item	Specification
Enclosure	IP67
Ambient operating temperature	-10 to +50°C
Ambient operating temperature for UL(CSA) compliance	0 to +50°C (no freezing and no condensation)
Ambient storage temperature	-20 to +60°C
Ambient humidity	35 to 85% RH (no condensation)
Altitude for UL(CSA) compliance	Up to 3000m
Pollution Degree for UL(CSA) compliance	3
Installation place for UL(CSA) compliance	Indoor
Vibration resistance	EN61131-2 compliant 5 ≤ f < 8.4 Hz 3.5 mm 8.4 ≤ f < 150 Hz 9.8 m/s ²
Impact resistance	EN61131-2 compliant, 147 m/s ² , 11 ms
Standards	CE/UKCA marked, UL(CSA) *1
Weight	40 g (body), 20 g (installation plate)

*1: UL (CSA) certification is only applicable when connected to an air management system.

* Products with tiny scratches or marks which do not affect the performance of the product are verified as conforming products.

Wireless communication specifications

Item	Specification
Protocol	SMC original protocol (SMC encryption)
Radio wave type (spread)	Frequency Hopping Spread Spectrum (FHSS)
Frequency band	2.4 GHz (2403~2481 MHz)
Frequency channel select function (F.C.S.)	Supported *1
Frequency channel	Max. 79 ch (Bandwidth: 1.0 MHz)
Communication speed	250 kbps(V.1.0) / 1 Mbps(V.2.0)
Frequency hopping cycle	5 ms(V.1.0) / 2ms(V.2.0)
Communication distance	Up to 100 m line of sight (depending on the environment)
Radio Law certificate	Refer to the official SMC website for the latest information as to which countries the product is certified.

*1: Refer to the operation manual of the Wireless System for details. Air management system does not support F.C.S function.

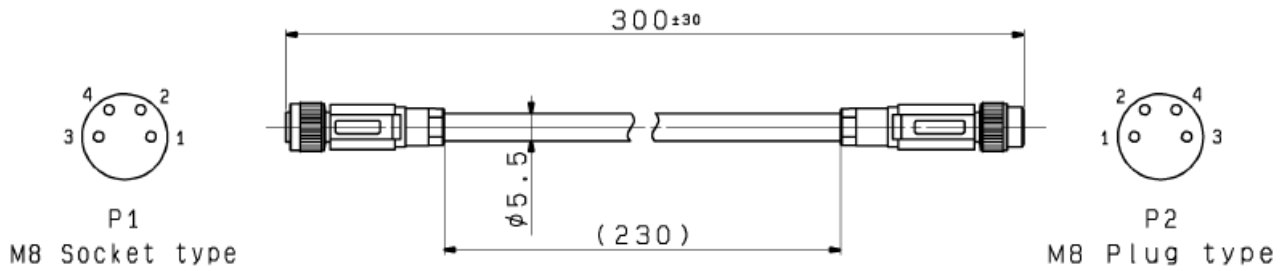
Accessories

Accessory List

For the selection of accessories, refer to the catalog.

Cable for wireless adaptor

EXW1-AC1-X1 Cable with M8 connector 300 mm



Notes

- This product must be used in a fixed position.
- Not suitable for rechargeable battery production facilities.
- This product is not UL certified.

Revision history

- 1: Content changes [May 2024]
- 2: Contents are added. [February 2025]

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URL <https://www.smcworld.com>

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