Wireless Auto Switch

Resource saving

Wireless power supply and communication for a completely wireless system.

Cable free

Zero risk of problems due to wire disconnection
Zero cable space and wiring work required
Zero switch failure due to cable deterioration

Battery-less (Wireless power supply / Using WPT)

* Radio station license required in Japan

Zero maintenance for battery replacement

WPT = Wireless Power Transfer
Power is supplied by emitting radio waves and converting the energy of the received radio waves into power.

* A built-in capacitor allows the switch to operate for 30 seconds when outside of the power supply range (depending on the operating frequency and environment).

<Example of a wireless auto switch installation>
When mounted to a CDQ2 cylinder (bore size: ø32, stroke: 150 mm)

⚠ Caution
- In Japan, a radio station license is required to use a power transmitter (WPT station). An application fee for opening a station and a radio wave usage fee are required.
- This product can only be used in countries that comply with Radio Law (Japan, United States, Canada). This product cannot be used in non-compliant countries.

Wireless Auto Switch
IN574 Series

RoHS

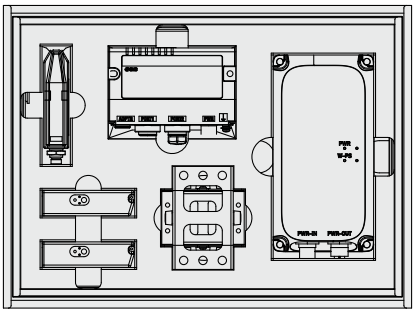
How to Order

Evaluation kit (Starter kit)

IN574 – 140 – 1 – EN

- **Wireless auto switch Evaluation kit**
- **Communication protocol**

Symbol	Protocol
EN	EtherNet/IP
PN	PROFINET
EC	EtherCAT



* Wireless auto switch can't be used alone.
  It needs wireless power transmitter and wireless base (including special adapter) for power supply and communication.
* We provide evaluation kit: starter kit which have necessary devices to use wireless auto switch.

Wireless auto switch

IN574 – 147

Wireless power transmitter

IN574 – 138 – 1

Evaluation Kit Contents

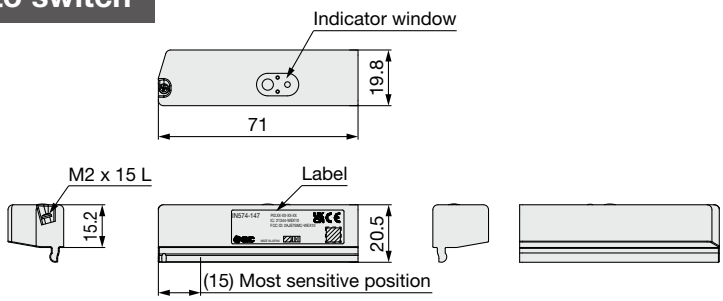
Description	Part no.	Quantity	Note
Wireless auto switch*1	IN574-147	2	
Wireless power transmitter*1	IN574-138-1	1	
Bracket for wireless power transmitter	—	1	
Operation manual for wireless power transmitter	—	1	
Leaflet to apply wireless station license	—	1	
Compact wireless base	<For EtherNet/IP> EXW1-BENAC1 <For PROFINET> EXW1-BPNAC1 <For EtherCAT> EXW1-BECAC	1	It varies depending on communication protocol type.*2
Wireless adapter	EXW1-A11N-X2	1	A dedicated for wireless auto switch*3
Installation plate for wireless adapter	EXW1-AB4	1	
Set screw for wireless adapter	—	1	2 pcs.
Operation manual for wireless adapter	—	1	
Wireless adapter cable	EXW1-AC001-SAPU	1	
Power supply cable for compact wireless base	PCA-1401804	1	M12 socket connector, 1.5 m
Communication cable	EX9-AC010EN-PSRJ	1	M12 plug/RJ-45 connector, 1 m
Power supply cable for wireless power transmitter	—	1	M12 socket connector, 1.5 m

*1 Refer to "Operational Manual" from the website about details of wireless auto switch and wireless power transmitter.
Please download the Operation Manual via SMC website.
*2 Download configuration file for each protocol from the website.
*3 It can't be used with standard wireless adapter.

Dimensions/Parts Description

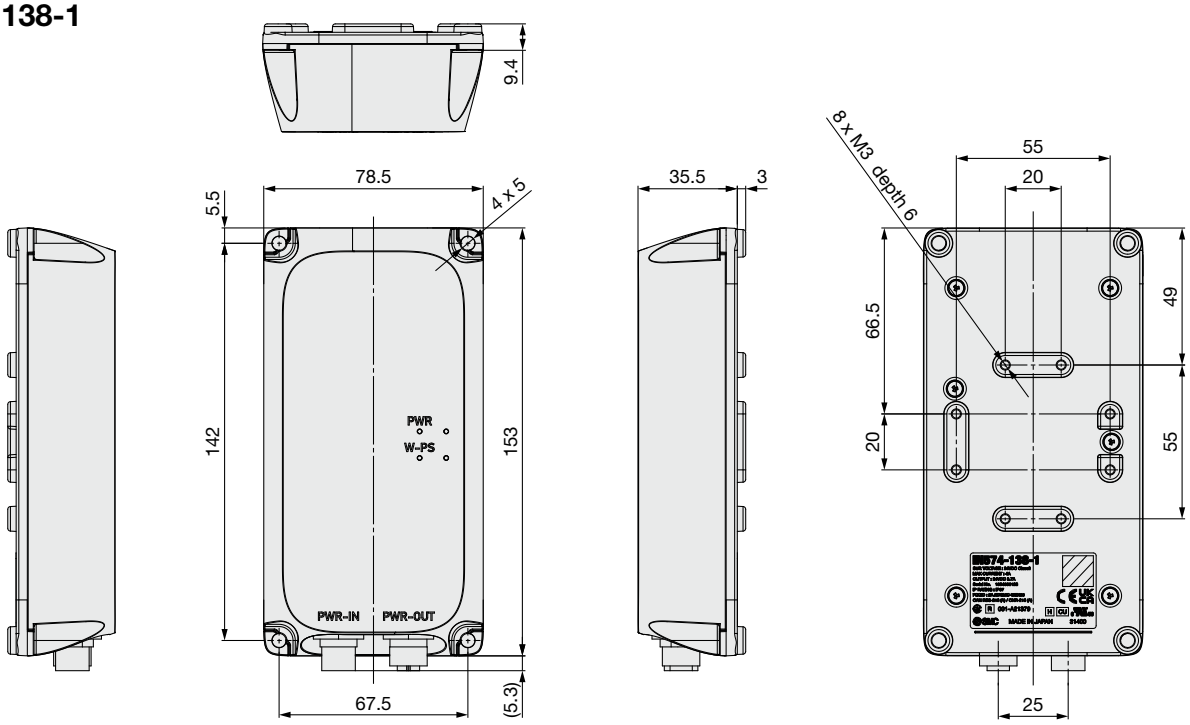
Wireless auto switch

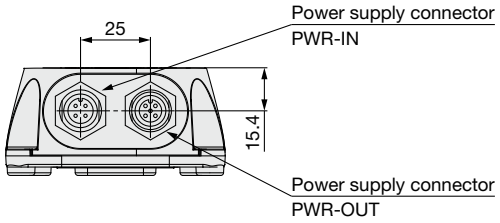
IN574-147



Wireless power transmitter

IN574-138-1





Power Supply Connector PWR-IN

No.	Signal	M12, 4 pins, plug A code
1	24V_In	
2	N.C.	
3	0 V	
4	N.C.	

Power Supply Connector PWR-OUT

No.	Signal	M12, 5 pins, socket A code
1	24V_Out	
2	N.C.	
3	0 V	
4	N.C.	
5	N.C.	

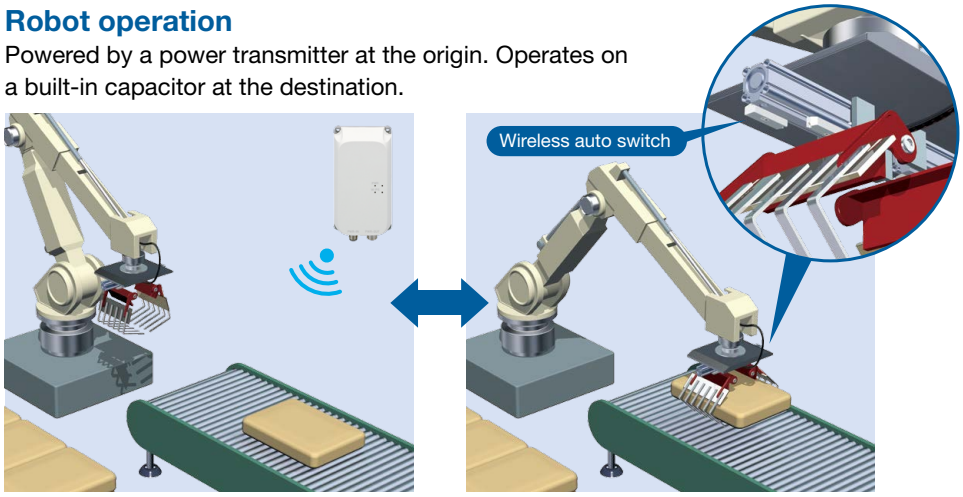
Wireless adapter

For the wireless adapter (EXW1-A11N-X2), please refer to the external dimensions of the standard product (EXW1-A11□).

Applications

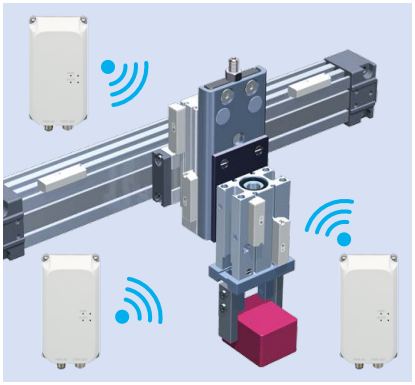
Robot operation

Powered by a power transmitter at the origin. Operates on a built-in capacitor at the destination.



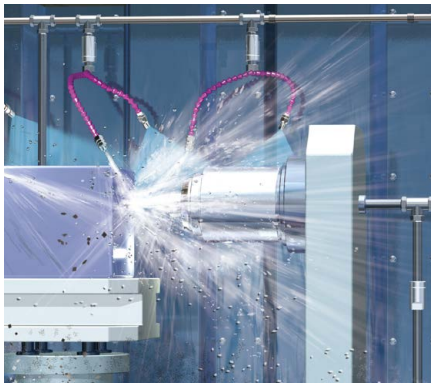
Transfer processes

Power is supplied by power transmitters at each transfer point.

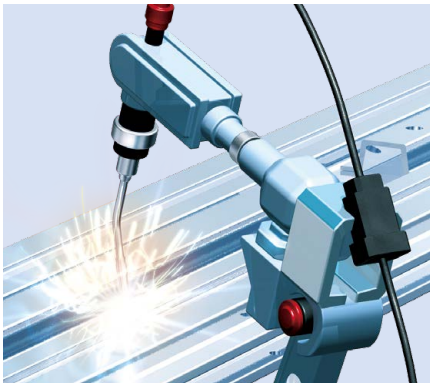


Processes where cable deterioration may occur

Machining processes

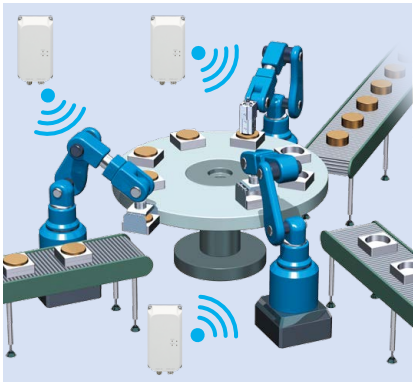


Arc welding processes



Rotating processes

Power is supplied by power transmitters at each transfer point.



Wireless Communication Features

The goal of this original wireless communication technology was to create wireless systems that could co-exist without interference. In automobile manufacturing welding processes, the product is able to operate without any wireless interference, even when other wireless communication (AGV, production information being sent via Wi-fi, etc.) is present in the surrounding area.

- Provides stable communication in FA environments
- Frequency hopping / Event communication system
- F.C.S. (Frequency Channel Select) supported

Compact Type EXW1 Series

Compact wireless Base

Compact wireless Remote

Modular Type EX600-W Series

* Not applicable for use on the same wireless network as the wireless auto switch.

⚠ Safety Instructions	Be sure to read the “Handling Precautions for SMC Products” (M-E03-3) and “Operation Manual” before use.