

Wireless Pushbutton Switches

A2W



- A wireless call button without a battery
- Confirm reception with LED

Innovative Switch That Connects People and Machines Wirelessly

Manufacturing sites continue to require more versatile and flexible production systems due to frequent changeover of low volume production.

OMRON wireless switches offer:

- Production lines without layout restrictions
- Simple addition to existing facilities
- Installation on moving parts





Omron's unique technologies change manufacturing

Self-generated power created by button operation. A design **WITHOUT BATTERIES** eliminates the need for maintenance.

Even in environments with noise or poor visibility, the pushbutton **LED INDICATOR** provides reception confirmation.

922.5MHz frequency band reduces interference, achieving highly reliable **WIRELESS COMMUNICATION**.

A Reliable Wireless Switch

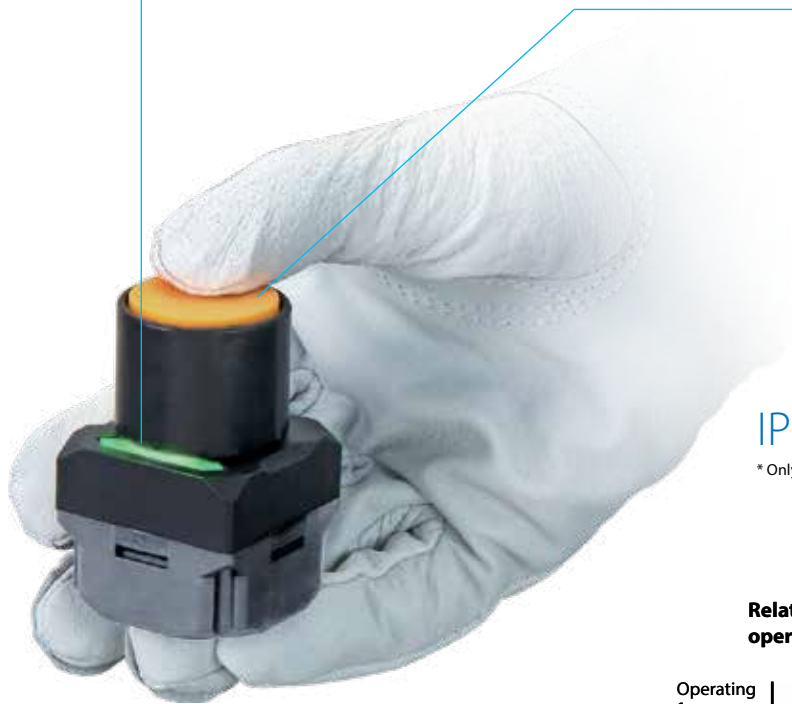
Patent pending

Reception Confirmation LED

Successful reception is confirmed by LED.

Detailed wireless communication status can be monitored.

Reception confirmation LED	Status
Green	Reception success (received field strength "Strong")
Yellow	Reception success (received field strength "Weak")
Red	Reception failure
Not Lit	Pushbutton fault (no signal transmission from Pushbutton)



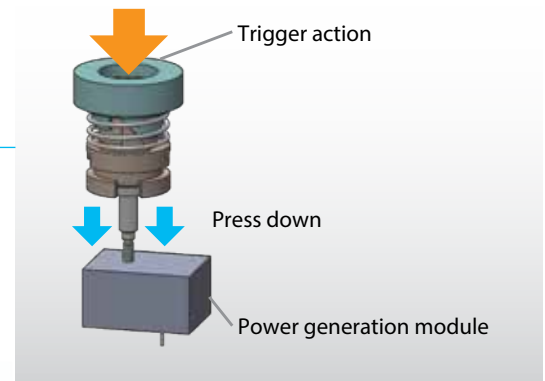
Tactile feedback even with gloves on

Patent pending

No batteries required due to Self-generating Power

Actuation force power eliminates battery management.

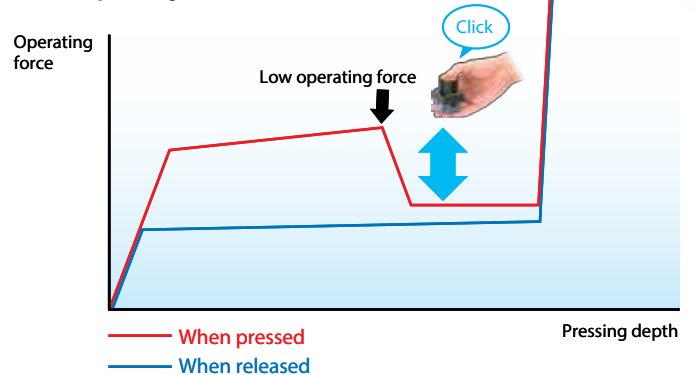
Trigger action operation drives the power generation module and generates stable electricity.



IP65 Protection

* Only for the main unit of pushbutton and optional antenna.

Relationship between pressing depth and operating force



Highly reliable communications

922.5MHz frequency band is less susceptible to interference than GHz frequencies

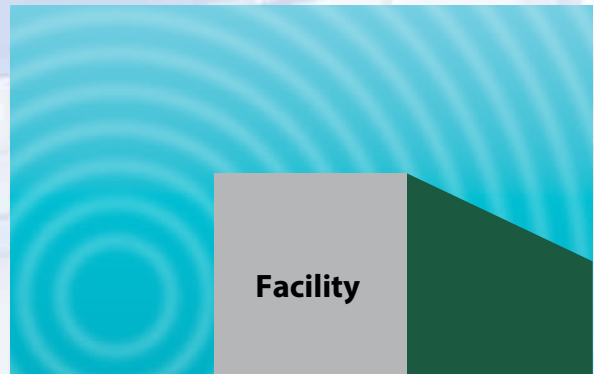
High propagation

Sub-GHz band (922.5 MHz)



Radio waves diffract around obstacles.

Quasi-microwave band (1 GHz to 3 GHz)



Radio waves are blocked by obstacles.

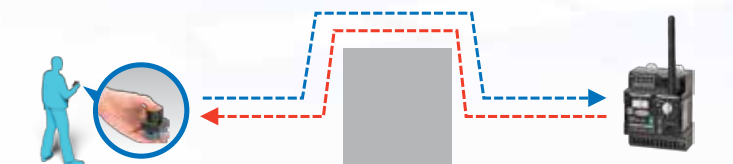
Long-range transmission

Transmission distance: approx. 100 m without obstacles

* Also without influence of noise



Transmission distance: approx. 30 to 50 m even with obstacles



A wide range of applications are available with wireless communication

Wireless communication eliminates issues caused by disconnection, time and expenses required for new floor plans



Workers who find a problem can immediately inform others.



The direction of adjustable conveyors can be changed.



Completion of loaded pallets can be reported.



Shutters can be remotely opened/closed from a forklift.



A forklift can alert others in the area to allow a safe path.



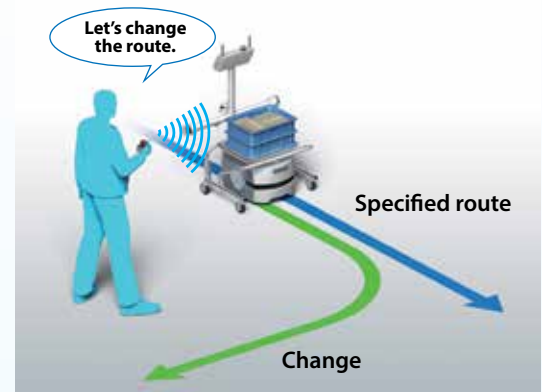
Floor plans can be changed without considering wiring.



Automated guided vehicles can be remotely activated/guided.

Unprecedented usage methods can create more value

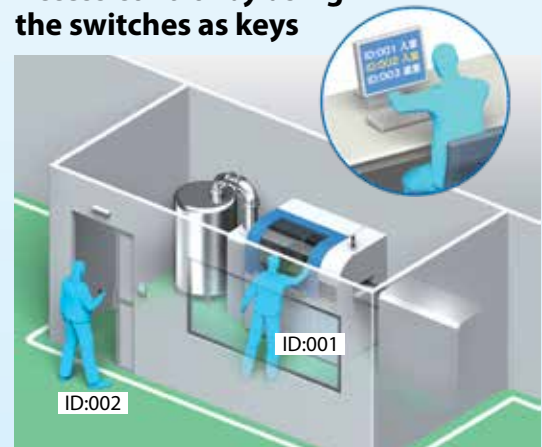
Route change of an automatic conveying robot



Transmission of simple information, such as a failure count





Access control by using the switches as keys




Note: Cannot be used for emergency stop.

Ordering Information

Unit

Type	Button type	Frequency (MHz)	Area	Button color	Flange color	Model
Slave button	 Mushroom	922.5	United States or Canada	Red	Black	A2W-TC-WC1 US1RB
			United States or Canada	Green	Black	A2W-TC-WC1 US1GB
			United States or Canada	Yellow	Black	A2W-TC-WC1 US1YB
			United States or Canada	Blue	Black	A2W-TC-WC1 US1AB
			United States or Canada	White	Black	A2W-TC-WC1 US1WB
			United States or Canada	Black	Red	A2W-TC-WC1 US1BR
			United States or Canada	Black	Yellow	A2W-TC-WC1 US1BY
			United States or Canada	Black	Black	A2W-TC-WC1 US1BB
			United States or Canada	Red	Black	A2W-TC-WC1 US2RB
	 Full guard		United States or Canada	Green	Black	A2W-TC-WC1 US2GB
			United States or Canada	Yellow	Black	A2W-TC-WC1 US2YB
			United States or Canada	Blue	Black	A2W-TC-WC1 US2AB
			United States or Canada	White	Black	A2W-TC-WC1 US2WB
			United States or Canada	Black	Red	A2W-TC-WC1 US2BR
			United States or Canada	Black	Yellow	A2W-TC-WC1 US2BY
			United States or Canada	Black	Black	A2W-TC-WC1 US2BB

Master Unit

Type	Frequency (MHz)	Area	Output configuration	Model
 Master	922.5	United States or Canada	Sinking Outputs	A2W-RCN-WC1 US
		United States or Canada	Sourcing Outputs	A2W-RCP-WC1 US

Note: This product is a wireless device that conforms to the radio regulations of United States or Canada. It cannot be used outside of United States or Canada. For product details, please contact us separately.

For use in Mexico, please contact Omron for A2W product that complies with Mexico federal communication regulations.

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