

Wireless Pushbutton Switches

A2W

World's first*

A “wireless, batteryless”
switch with
“reception confirmation LED”



* Based on November 2017 OMRON investigation.

On-site Innovation Created by a Switch that Connects People and Machines “Wirelessly”

With increasing high-mix low-volume production and more frequent changeovers of products, manufacturing sites increasingly require more versatile and flexible production systems.

OMRON wireless switches offer:

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

Achieve flexible on-site design with high reliability.
Contribute to enhanced productivity.



DAILY PRODUCTION REPORT						15/NOV/12	
12:44	EQ.LACT	EQ.VAR	MAKPTS	PFSTAR			
UP TIME %	97.3	116	3	100			
F.A.L	DPR	CSL	DOORS	EQ.L.REP	FLOAT TGT	INT	PLT
0	95	85			3	69	88
0	85.7	111					



OMRON's unique technologies change the manufacturing.

Self-power generation by the pushing force

BATTERYLESS design eliminates the need for maintenance.

Even in environments with poor visibility or noise

The RECEPTION CONFIRMATION LED provides peace of mind.

Highly diffractive sub-GHz frequency band

ACHIEVES HIGHLY RELIABLE WIRELESS COMMUNICATION.

A Wireless Switch with Reliability and Usability

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
No lit	Slave button fault (no signal transmission from Slave button)



Degree of protection: IP65

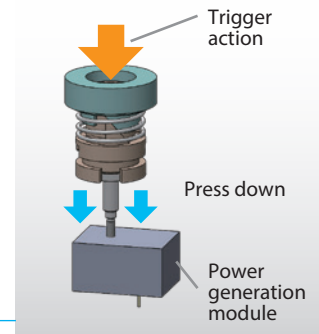
* Only for the main unit of Slave button and optional antenna.

Patent pending

Batteryless due to self-power generation

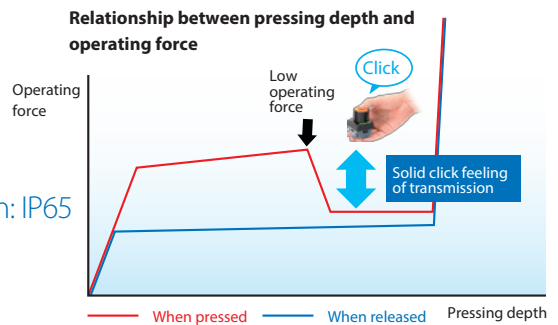
Self-power generation by the pushing force eliminates battery management.

Operation by the trigger action drives the power generation module and generates stable electricity.



Feel the click firmly even with gloves on

The feel when you click strikes a balance between lower operating force and solid feeling of transmission.



Highly reliable communications

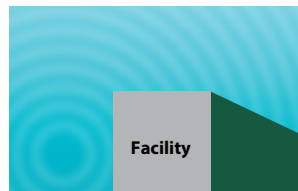
Sub-GHz-band that is less susceptible to obstacles

High diffraction and high penetration



Sub-GHz band (900 MHz)

The radio wave is subject to block by obstacles as it goes straight without diffraction.



Quasi-microwave band (1 GHz to 3 GHz)

The radio wave goes straight without diffraction, being 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

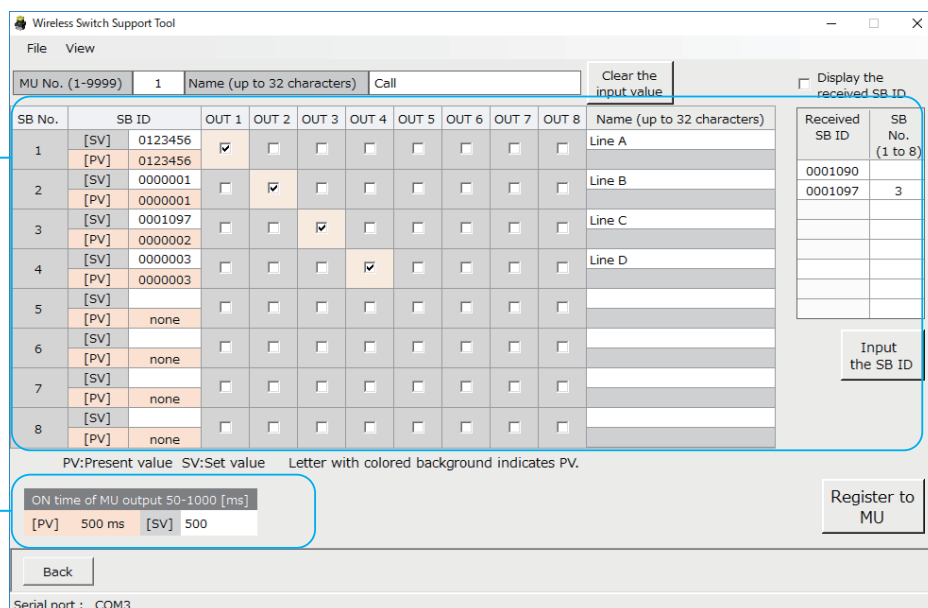


Easy Setup and Evaluate with “Wireless Switch Support Tool”, Available for Free

Wireless Switch Support Tool enables easy settings of the master unit and confirmation of radio field intensity transmitted from the slave buttons.

Visualization of master unit settings

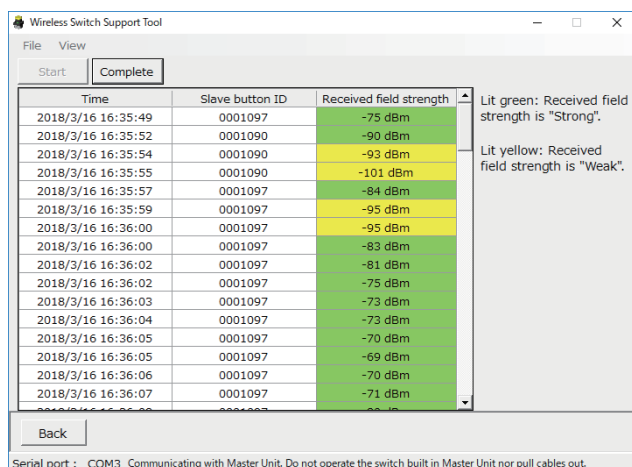
You can confirm and change the state of registration, deletion of each slave button.



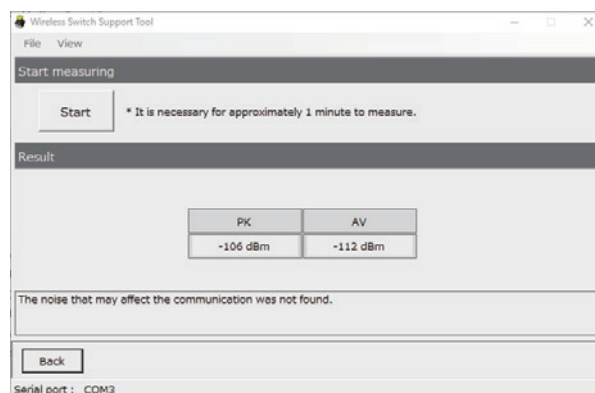
Control output (one-shot) ON duration of master unit is configurable.

Quantitative evaluation of radio wave intensity

Display the radio wave intensity received from slave buttons



Confirmation of noise intensity surrounding the master unit

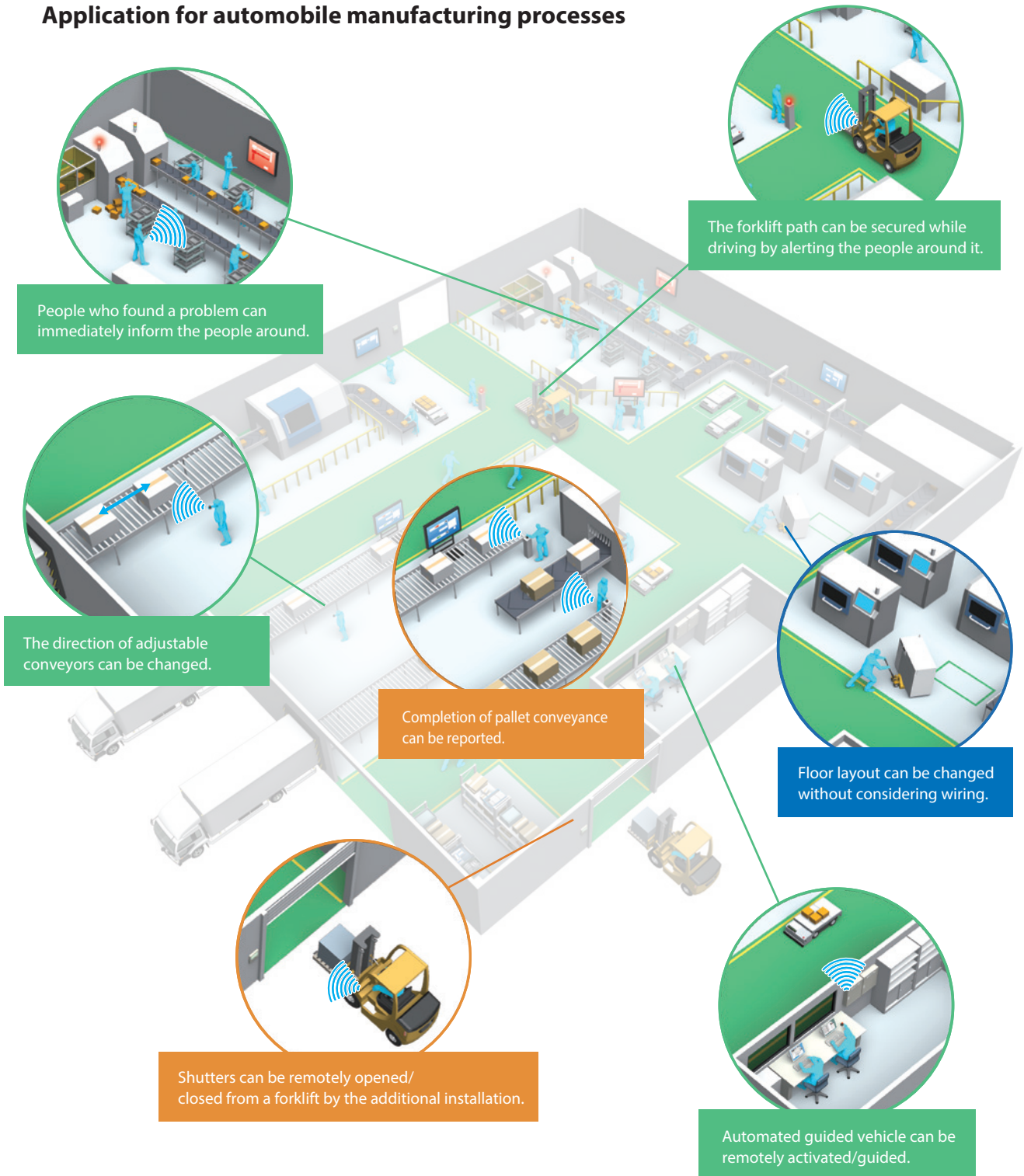


Note: For use of Wireless Switch Support Tool, the USB serial conversion cable (E58-CIFQ2) and the conversion cable (E58-CIFQ2-E) are necessary.

Wireless Communications Enables a Wide Range of Applications.

Wireless communications reduces the troubles caused by disconnection, and time and expenses required for rearrangement of floor layout.

Application for automobile manufacturing processes



Benefit of wireless 1

Man-hours reduction

Easy to change equipment layout without re-wiring effort

Benefit of wireless 2

Work efficiency improvement

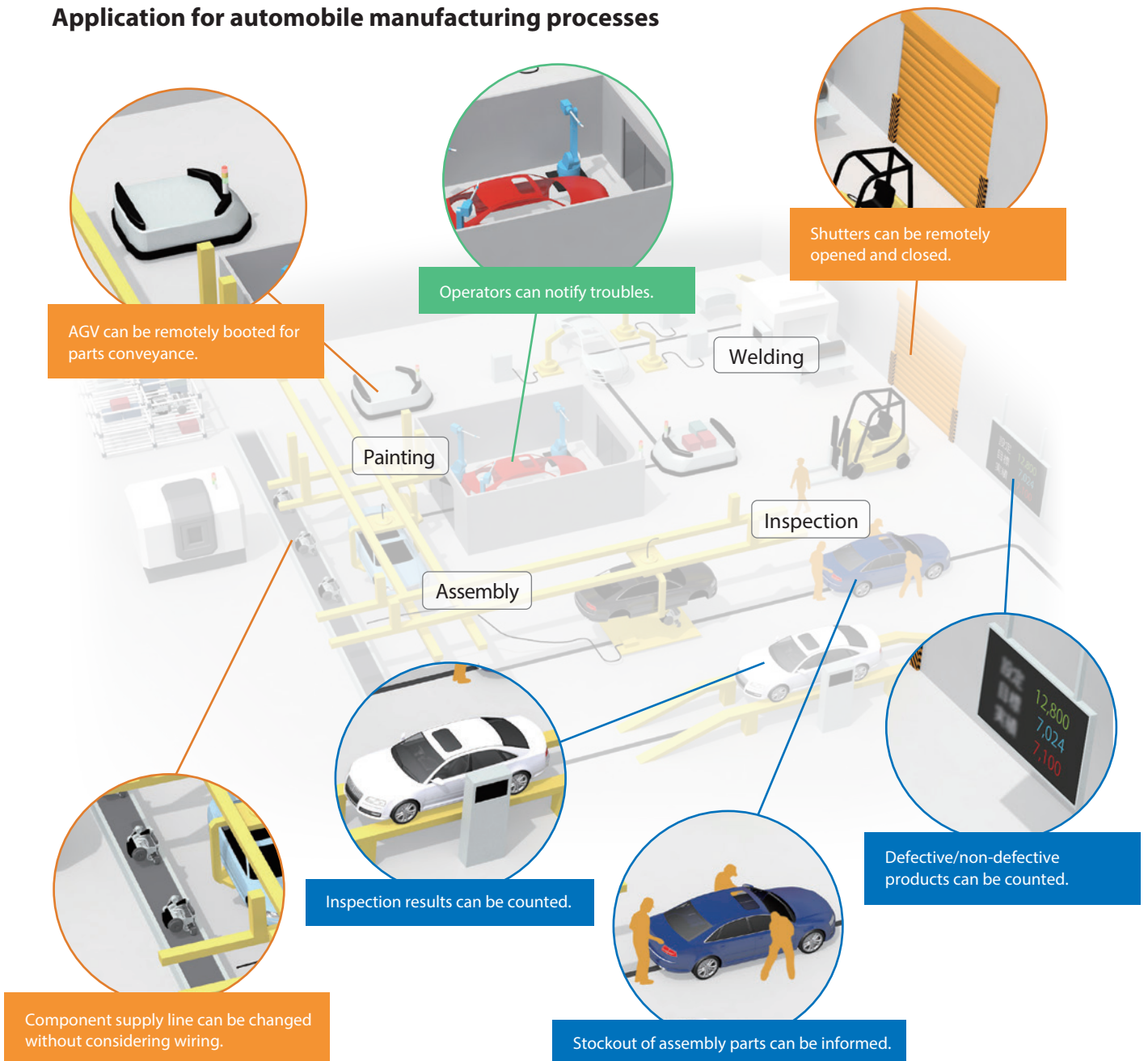
Unfixed slave buttons eliminates location constraints in the work space

Benefit of wireless 3

Conveying work efficiency improvement










Unfixed slave buttons makes it possible to press buttons without getting in and out of a moving truck

Application for automobile manufacturing processes



Main Specifications

[Slave button]

Button type	Mushroom, Full guard					
Button color	Green 	Yellow 	White 	Blue 	Black 	Red 
Flange color	Yellow 	Black 	Red 			
Degree of protection	IP65					

[Master Unit]

Rated voltage	24 VDC
Allowable voltage range	21.6 to 26.4 VDC
Output circuit shared voltage	30 VDC max.
Maximum load current	50 mA per point
Output logic	One-shot (500 ms)
Number of connected Slave buttons	8 max.
Accessories	Extension antenna (cable length 2.5 m), Slave button strap



Our shared Value Design for Panel (herein after referred to as Value Design) concept for the specifications of products used in control panels will create new value to our customer's control panels.

Combining multiple products that share the Value Design concept will further increase the value provided to control panels.

*Only for Main Units.

Before you place an order, please read and understand "Agreement for Using the Product" available on Omron's latest "Best Control Devices Omron," "General Brochure," or Omron's website.

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