

Use of wireless LAN makes FA network system comfortable!



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Wireless LAN Adapter

Powered by CONTEC

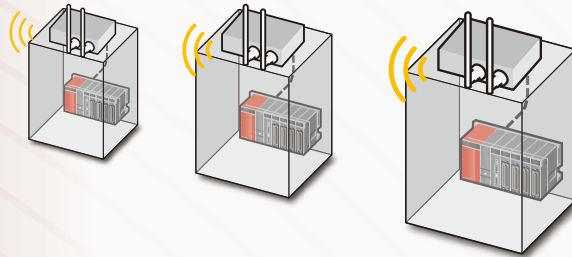
Wireless LAN needs no cables!



Point1 Convenient!.....P2

Wireless LAN makes shop processes easy and handy!

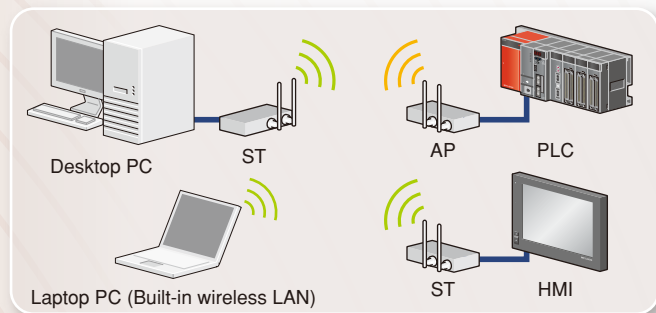
- Easy to work without being bothered by cable routing.
- Provides flexibility in installing new line or alteration layouts.
- Wireless saves your wiring costs.



Point2 Simple!.....P3

Simply installing wireless LAN adapters makes existing FA equipment wireless.

- Easy to make existing network wireless.
- Easy to network PLCs and HMIs.



AP: Access point, ST: Station

Point3 Secured!.....P4

Prevents unauthorized access of eavesdropping and data falsification!

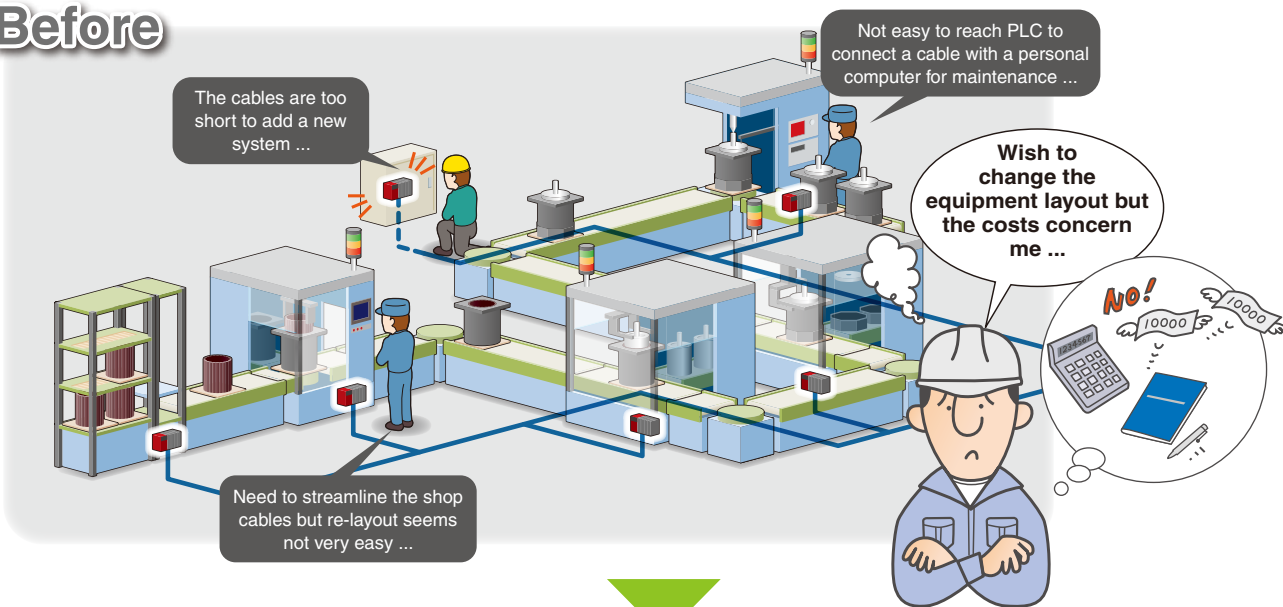
- Compatible with the latest security standards of WPA2/WPA.
- The security prevents unauthorized access from outside.

POINT 1
Convenient!

Wireless LAN makes shop processes easy and handy!

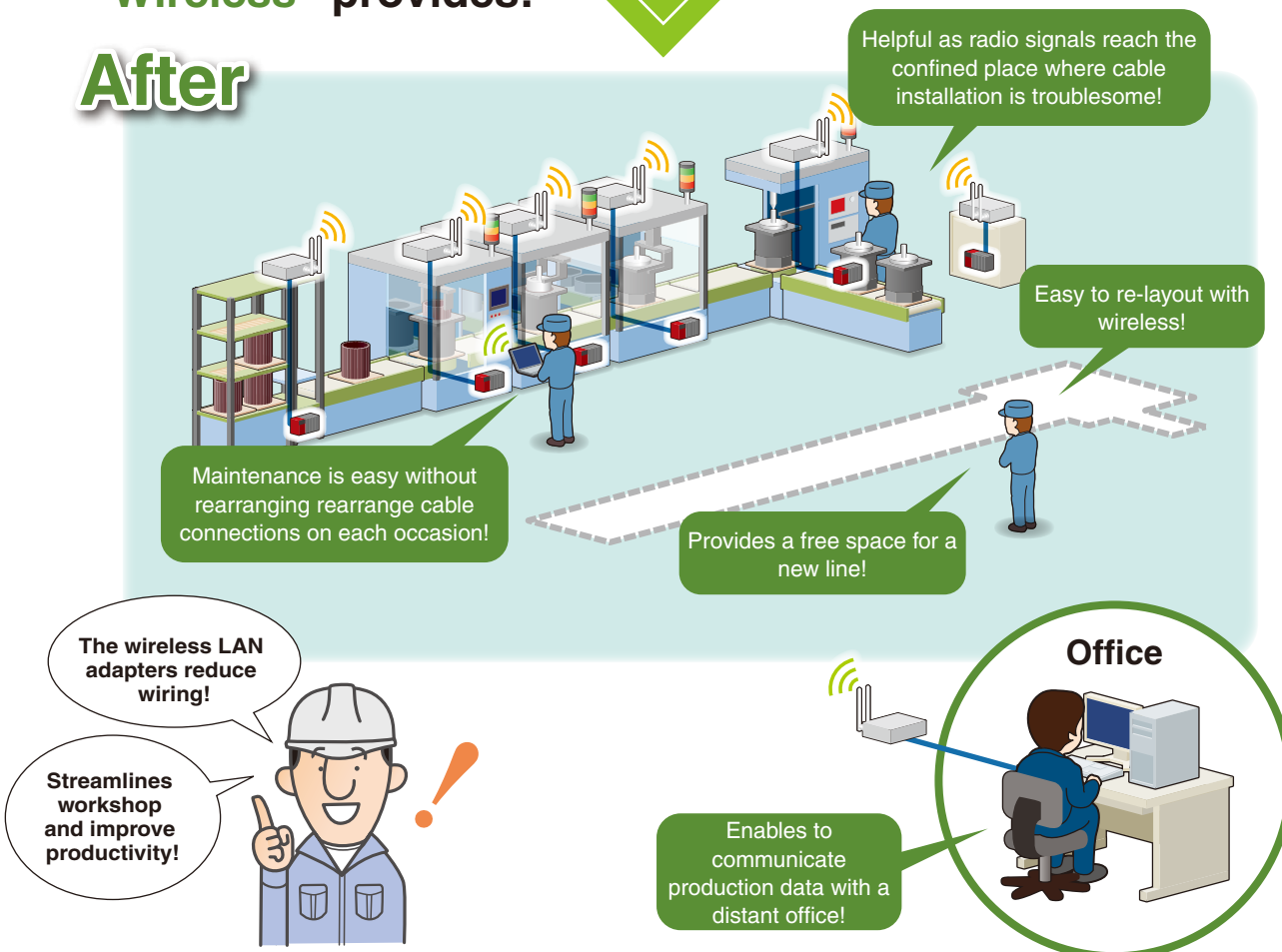
- ▶ Easy to work without being bothered by cable routing.
- ▶ Provides flexibility in installing new line or alteration layouts.
- ▶ Wireless saves the wiring costs.

Before



“Wireless” provides:

After

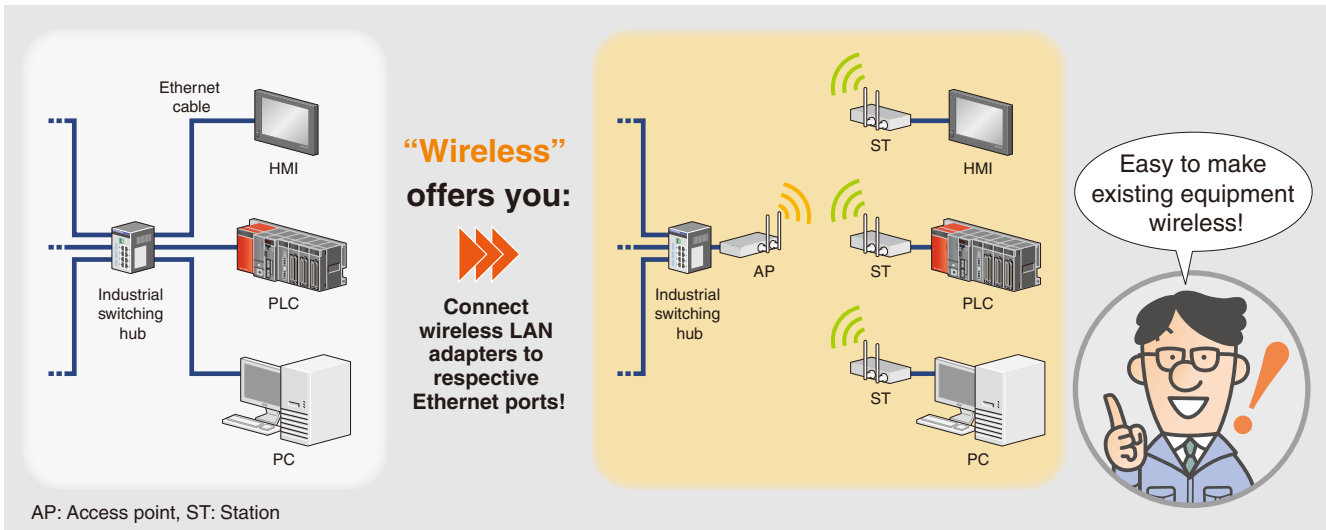


POINT 2 Simple!

Simply installing wireless LAN adapters makes existing FA equipment wireless.

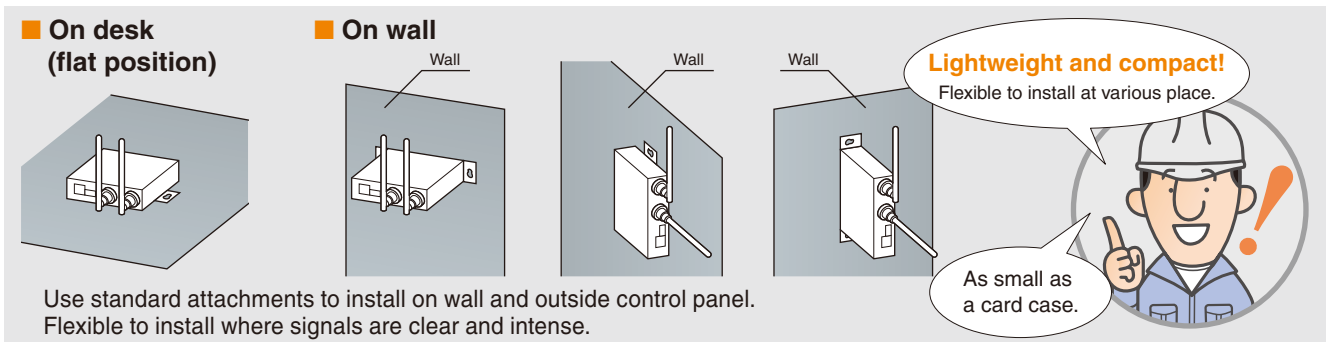
Wireless comes easy

- ▶ Easy to make existing network wireless.
- ▶ Easy to network PLCs and HMIs.



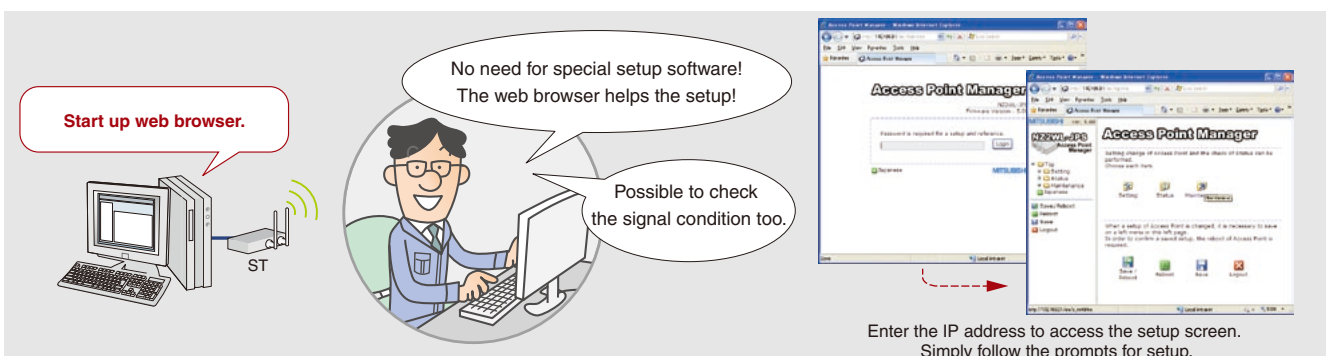
Easy to install

- ▶ Easy to install. Also, flexible to install depending on control panel orientation and shop layout.
- ▶ Lightweight and compact. Flexible to install at various place.
- ▶ Accommodates wide input power supply (12 to 24 VDC). Easy to use.



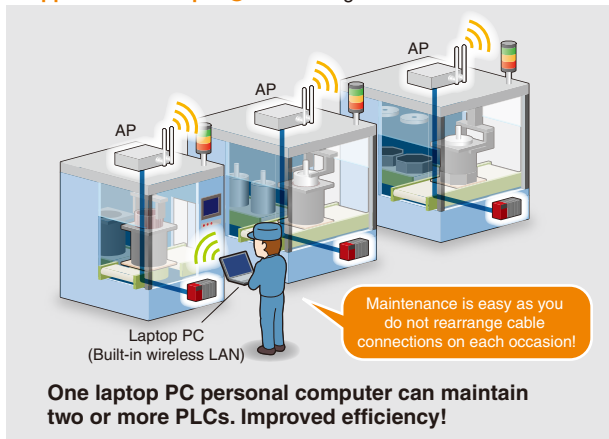
Easy to set up

- ▶ Easy setup with web browser. No need for special setup software.

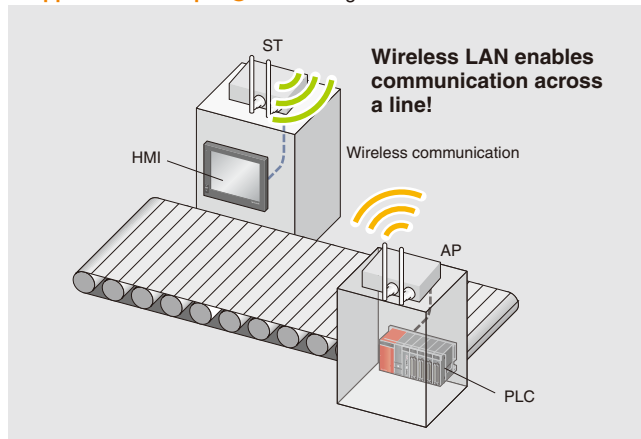


▶ Wireless LAN works in various factories.

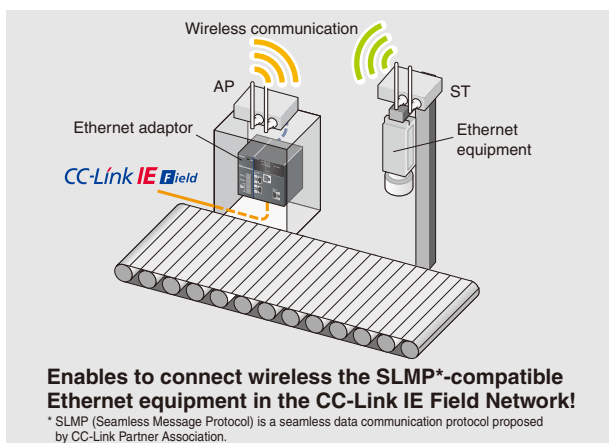
■ Application example ① Connecting PC with two or more PLCs



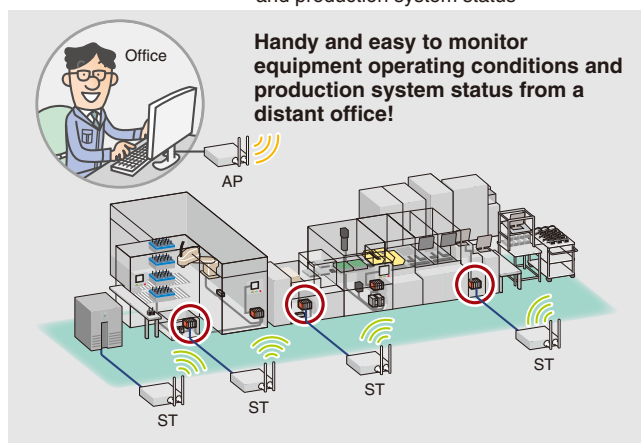
■ Application example ② Connecting HMI with PLC



■ Application example ③ Connecting Ethernet equipment



■ Application example ④ Monitoring equipment operating conditions and production system status

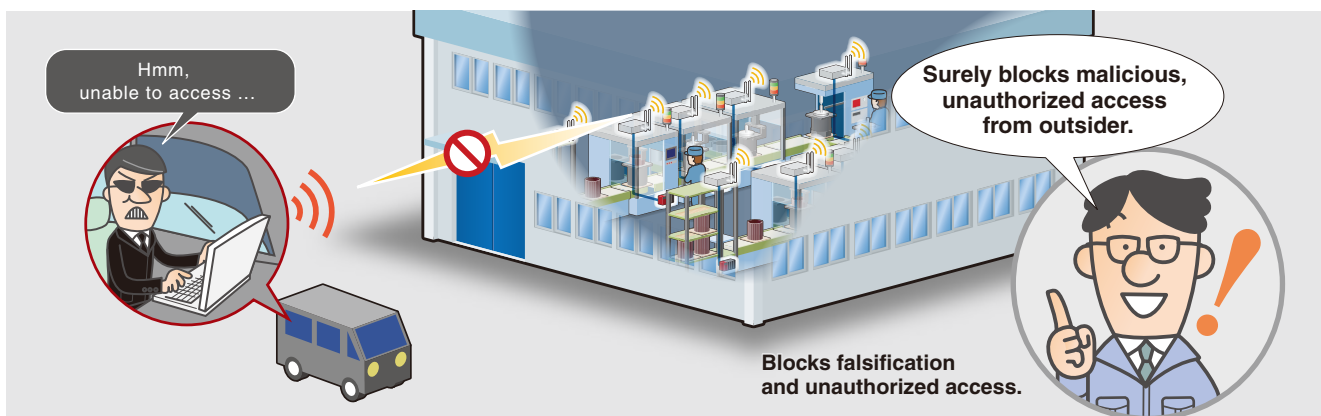


Note: Ethernet data communication through wireless LAN could be unstable compared to wired one due to packet loss depending on peripheral conditions and place of installation. Be sure to confirm it works as intended.

POINT 3 Secured!

Prevents unauthorized access of eavesdropping and data falsification!

- ▶ Compatible with the latest security standards of WPA2/WPA.
- ▶ The security prevents unauthorized access from outside.



Connectable Equipment

The following FA products can be connected.*1

Type	Model
Programmable Controller	MELSEC-Q Series Ethernet Interface Module (for 10BASE-T/100BASE-TX)
	CC-Link IE Field Network Ethernet Adapter Module *2
	Industrial Switching HUB
	MELSEC-Q Series CPU Module (with Built-in Ethernet)
	MELSEC-L Series CPU Module
	C Controller Module
	High Speed Data Logger Module
HMI	GOT1000 Series (with Built-in Ethernet)
	GOT1000 Series Ethernet Communication Unit
Motion Controller	Motion Controller Q Series Motion CPU Module
	Motion Controller Q Series Stand-Alone Motion Controller
CNC	MITSUBISHI CNC M700/M70 Series
	MITSUBISHI CNC M700V/M70V Series
	MITSUBISHI CNC C70 Series
Industrial Robot	RV-SQ Series
	RH-SQ Series
	RV-SD Series
	RH-SD Series
	RH-F Series

Type	Model
Software	GX Works2
	GX LogViewer
	GX IEC Developer
	MX Component
	MX Sheet
	PX Developer
	PX Developer Monitor Tool
	LCPU Logging Configuration Tool
	C Controller Module Setting / Monitoring Tool
	CW Workbench
	High Speed Data Logger Module Configuration Tool
	GT Works3
	MT Works2
	CNC Remote Operating Tool (NC Monitor/NC Explorer)
	RT ToolBox2

*1 Do not use this product for applications that must transmit or update data regularly or within a given time period, such as the cyclic transmission of a programmable controller. This shows the products that can be connectable as of November 2011. As the connectable products are increasing in number, consult your local Mitsubishi Electric branch office for update or see the product manual.

*2 The NZ2WL series can be connected only to the Ethernet part of this module. The NZ2WL series cannot be connected to the CC-Link IE Field Network part of this module.

Specifications

Item		Specification	
Wired LAN	Ethernet standard	IEEE802.3(10BASE-T), IEEE802.3u(100BASE-TX)	
	Data transfer speed	10/100Mbps	
	Access method	CSMA/CD	
	Communication type	Half Duplex, Full Duplex	
	Number of ports	1 (10BASE-T/100BASE-TX)	
Wireless LAN *	IEEE802.11a	Transmission format	IEEE802.11a-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	Differs from one country to another. See the list of channels for each country.
		Data transfer speed *2	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA-PSK (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB, WSL (Proprietary encryption) AP only : WPA (AES, TKIP), WPA2 (AES, TKIP), MAC address filtering, IEEE802.1X (EAP-TLS, PEAP)
	IEEE802.11b	Transmission format	IEEE 802.11b-compliant DSSS
		Channel	Differs from one country to another. See the list of channels for each country.
		Data transfer speed *2	11, 5.5, 2, 1Mbps (Fixed/Auto)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA-PSK (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB, WSL (Proprietary encryption) AP only : WPA (AES, TKIP), WPA2 (AES, TKIP), MAC address filtering, IEEE802.1X (EAP-TLS, PEAP)
	IEEE802.11g	Transmission format	IEEE802.11g-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	Differs from one country to another. See the list of channels for each country.
		Data transfer speed *2	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA-PSK (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB, WSL (Proprietary encryption) AP only : WPA (AES, TKIP), WPA2(AES, TKIP), MAC address filtering, IEEE802.1X (EAP-TLS, PEAP)
Antenna	Diversity dipole antenna		
External Dimensions (mm)	25(W) x 68(D) x 97(H) (Not including antenna and other projecting parts)		
Weight(g)	250g		

*1 Does not guarantee inter-connectivity with other vendors' Wi-Fi products.

*2 These are theoretical values based on their respective wireless LAN standards. They do not indicate actual data transfer rates.

List of Country Channels

Standard	Channel						
	Japan*1		U.S.A.*1	Europe*1	China*1	Korea*1	Taiwan*1
	NZ2WL-JPA (Access point)	NZ2WL-JPS (Station)	NZ2WL-US*2	NZ2WL-EU*2	NZ2WL-CN*2	NZ2WL-KR*2	NZ2WL-TW*2
IEEE802.11a	8ch (36, 40, 44, 48ch[W52], 52, 56, 60, 64ch[W53])	12ch (34, 38, 42, 46ch[J52], 36, 40, 44, 48ch[W52], 52, 56, 60, 64ch[W53])	9ch (36, 40, 44, 48, 149, 153, 157, 161, 165ch)	4ch (36, 40, 44, 48ch)	5ch (149, 153, 157, 161, 165ch)	7ch (36, 40, 44, 149, 153, 157, 161ch)	5ch (149, 153, 157, 161, 165ch)
IEEE802.11b	14ch(1 - 14ch)		11ch(1 - 11ch)	13ch(1 - 13ch)	13ch(1 - 13ch)	13ch(1 - 13ch)	11ch(1 - 11ch)
IEEE802.11g	13ch(1 - 13ch)						

*1 Each product can be used only in the respective countries.

*2 Supported both Access point and Station. They can be used by changing the setting.

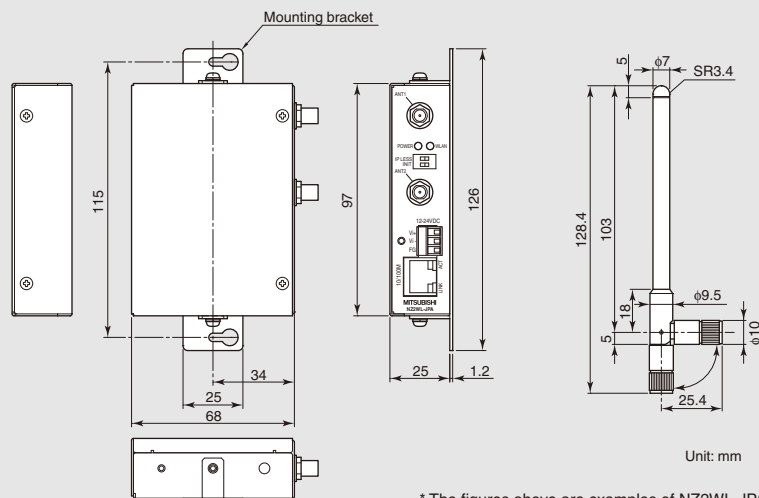
Software Specifications

Item	Specification
Protocols	IP(RFC791), ICMP(RFC792), UDP(RFC768), TCP(RFC793,896), ARP(RFC826), HTTPD(RFC1866), TELNET(RFC854), FTPD(RFC959), TFTP(RFC783,906), DHCP(RFC2131), SNTP(RFC1361), SNMP(RFC1067)

Installation Environment Requirements (Environmental Specifications)

Item	Specification
Input voltage range	12 - 24VDC±5%
Rating input current	0.4A(at 12VDC input), 0.2A(at 24VDC input) (Max.) Fuse /2.0A non-user serviceable (Rated interrupting current: 50A)
Operating ambient temperature	0 - 50°C
Operating ambient humidity	10 - 90%RH (No condensation)
Floating dust particles	Tolerant of small amounts (non excessive)
Corrosive gases	None

External Dimensions



* The figures above are examples of NZ2WL-JPA.
All the other types of wireless LAN adapters have the same external dimensions.

Product List

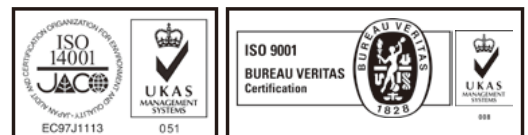
Product name		Model	Outline	
Wireless LAN Adapter	Japan	Access point	NZ2WL-JPA	Conforms to IEEE 802.11a (W52/ W53), IEEE 802.11b, IEEE 802.11g standards
		Station	NZ2WL-JPS	Conforms to IEEE 802.11a (J52/ W52/ W53), IEEE 802.11b, IEEE 802.11g standards
	U.S.A.		NZ2WL-US	Conforms to IEEE 802.11a, IEEE 802.11b, IEEE 802.11g standards
	Europe		NZ2WL-EU	Conforms to IEEE 802.11a, IEEE 802.11b, IEEE 802.11g standards
	China		NZ2WL-CN	Conforms to IEEE 802.11a, IEEE 802.11b, IEEE 802.11g standards
	Korea		NZ2WL-KR	Conforms to IEEE 802.11a, IEEE 802.11b, IEEE 802.11g standards
	Taiwan		NZ2WL-TW	Conforms to IEEE 802.11a, IEEE 802.11b, IEEE 802.11g standards

Related products

Product name	Model	Outline
Industrial switching HUB	NZ2EHG-T8	10 Mbps/100 Mbps/1 Gbps AUTO-MDIX, DIN rail mountable, 8 ports
	NZ2EHF-T8	10 Mbps/100 Mbps AUTO-MDIX, DIN rail mountable, 8 ports

The wireless LAN adapters and industrial switching hubs were developed and are produced with CONTEC Co., Ltd. Please note that the general specifications and guarantee conditions of these products are different from those of programmable logic controllers (such as MELSEC-Q and L series).

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Mitsubishi Electric

Wireless LAN Adapter

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- The products have been manufactured as general-purpose parts for general industries, and have not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the products for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
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