TECHNICAL BULLETIN

FA-A-0251-A

Production discontinuation of wireless LAN adapter

■Date of Issue
October 2017 (Ver. A: March 2019)
■Relevant Models
NZ2WL-JPA, NZ2WL-JPS, NZ2WL-US, NZ2WL-CN, NZ2WL-KR, NZ2WL-TW

Thank you for your continued support of Mitsubishi Electric programmable controllers.
Production of the wireless LAN adapter will be discontinued.

1   Model to be discontinued (6 models)

Product	Model
Wireless LAN adapter (for Japan) (access point)	NZ2WL-JPA
Wireless LAN adapter (for Japan) (station)	NZ2WL-JPS
Wireless LAN adapter (for the United States)	NZ2WL-US
Wireless LAN adapter (for China)	NZ2WL-CN
Wireless LAN adapter (for Korea)	NZ2WL-KR
Wireless LAN adapter (for Taiwan)	NZ2WL-TW

2   Schedule

Transition to made-to-order: April 1, 2018
Order acceptance: Through August 31, 2018
Production discontinuation: September 30, 2018

3   Reason for discontinuation

Some parts of the above products are now obsolete, and we will have difficulty to maintain our production system.

4   Repair support

Repair support period: Until September 30, 2024 (for six years after the discontinuation of production)
Repair support period is for six years after the discontinuation of these products because the products were jointly developed and manufactured by Mitsubishi Electric and CONTEC.

5   Alternative models

There is no alternative model available. When replacing the products with a new one, please consider purchasing an industrial wireless LAN adapter on the market. For that wireless LAN adapter applicable for Mitsubishi Electric programmable controllers or HMI (Human Machine Interface), refer to "7 Industrial wireless LAN adapter available on the market (applicable product)".
For specifications of the products, refer to "6 Specifications".

MITSUBISHI ELECTRIC CORPORATION

6   Specifications

6.1   NZ2WL-JPA

Item			Specifications
Wired LAN	Ethernet standards		IEEE802.3 (10BASE-T) IEEE802.3u (100BASE-TX)
	Data transfer speed		10/100Mbps
	Access method		CSMA/CD
	Communication method		Half Duplex, Full Duplex
	Number of effective ports		1 (10BASE-T/100BASE-TX)
Wireless LAN	IEEE802.11a	Transmission format	IEEE802.11a-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	8ch (36, 40, 44, 48ch [W52], 52, 56, 60, 64ch [W53])
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		Wireless Category	Low power data communications system (5.150 to 5.350GHz)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA (AES, TKIP), WPA-PSK (AES, TKIP), WPA2 (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB WSL (Proprietary encryption), MAC address filtering, IEEE802.1X (EAP-TLS, PEAP)
	IEEE802.11b	Transmission format	IEEE802.11b-compliant DSSS
		Channel	14ch (1 to 14ch)
		Data transfer speed[*1]	11, 5.5, 2, 1Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		Wireless Category	Low power data communications system (2.400 to 2.497GHz)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA (AES, TKIP), WPA-PSK (AES, TKIP), WPA2 (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB WSL (Proprietary encryption), MAC address filtering, IEEE802.1X (EAP-TLS, PEAP)
	IEEE802.11g	Transmission format	IEEE802.11g-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	13ch (1 to 13ch)
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		Wireless Category	Low power data communications system (2.4 to 2.4835GHz)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA (AES, TKIP), WPA-PSK (AES, TKIP), WPA2 (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB WSL (Proprietary encryption), MAC address filtering, IEEE802.1X (EAP-TLS, PEAP)
Antenna			Diversity dipole antenna
External dimensions (mm)			25 (W) × 68 (D) × 97 (H) (Not including antenna and other projecting parts)
Weight (g)			250g
Installation environment	Input voltage range		12 to 24VDC±5%
	Rated 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 to 50℃
	Operating ambient humidity		10 to 90%RH (No condensation)
	Floating dust particles		Tolerant of small amounts (non-excessive)
	Corrosive gases		None

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

6.2 NZ2WL-JPS

Item			Specifications
Wired LAN	Ethernet standards		IEEE802.3 (10BASE-T) IEEE802.3u (100BASE-TX)
	Data transfer speed		10/100Mbps
	Access method		CSMA/CD
	Communication method		Half Duplex, Full Duplex
	Number of effective ports		1 (10BASE-T/100BASE-TX)
Wireless LAN	IEEE802.11a	Transmission format	IEEE802.11a-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	12ch (34, 38, 42, 46ch [J52], 36, 40, 44, 48ch [W52], 52, 56, 60, 64ch [W53])
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		Wireless Category	Low power data communications system (5.150 to 5.350GHz)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA-PSK (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB WSL (Proprietary encryption)
	IEEE802.11b	Transmission format	IEEE802.11b-compliant DSSS
		Channel	14ch (1 to 14ch)
		Data transfer speed[*1]	11, 5.5, 2, 1Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		Wireless Category	Low power data communications system (2.400 to 2.497GHz)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA-PSK (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB WSL (Proprietary encryption)
	IEEE802.11g	Transmission format	IEEE802.11g-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	13ch (1 to 13ch)
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		Wireless Category	Low power data communications system (2.4 to 2.4835GHz)
		Aerial power	10mW/MHz or less
		Security	WEP, WPA-PSK (AES, TKIP), WPA2-PSK (AES, TKIP), AES-OCB WSL (Proprietary encryption)
Antenna			Diversity dipole antenna
External dimensions (mm)			25 (W) × 68 (D) × 97 (H) (Not including antenna and other projecting parts)
Weight (g)			250g
Installation environment	Input voltage range		12 to 24VDC±5%
	Rated 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 to 50℃
	Operating ambient humidity		10 to 90%RH (No condensation)
	Floating dust particles		Tolerant of small amounts (non-excessive)
	Corrosive gases		None

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

6.3 NZ2WL-US

Item			Specifications
Wired LAN	Ethernet standards		IEEE802.3 (10BASE-T) IEEE802.3u (100BASE-TX)
	Data transfer speed		10/100Mbps
	Access method		CSMA/CD
	Communication method		Half Duplex, Full Duplex
	Number of effective ports		1 (10BASE-T/100BASE-TX)
Wireless LAN	IEEE802.11a	Transmission format	IEEE802.11a-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	36, 40, 44, 48, 149, 153, 157, 161, 165ch
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	IEEE802.11b-compliant DSSS
		Channel	11ch (1 to 11ch)
		Data transfer speed[*1]	11, 5.5, 2, 1Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	11ch (1 to 11ch)
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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) × 68 (D) × 97 (H) (Not including antenna and other projecting parts)
Weight (g)			250g
Installation environment	Input voltage range		12 to 24VDC±5%
	Rated 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 to 50℃
	Operating ambient humidity		10 to 90%RH (No condensation)
	Floating dust particles		Tolerant of small amounts (non-excessive)
	Corrosive gases		None

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

6.4   NZ2WL-CN

Item			Specifications
Wired LAN	Ethernet standards		IEEE802.3 (10BASE-T) IEEE802.3u (100BASE-TX)
	Data transfer speed		10/100Mbps
	Access method		CSMA/CD
	Communication method		Half Duplex, Full Duplex
	Number of effective ports		1 (10BASE-T/100BASE-TX)
Wireless LAN	IEEE802.11a	Transmission format	IEEE802.11a-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	149, 153, 157, 161, 165ch
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	IEEE802.11b-compliant DSSS
		Channel	13ch (1 to 13ch)
		Data transfer speed[*1]	11, 5.5, 2, 1Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	13ch (1 to 13ch)
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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) × 68 (D) × 97 (H) (Not including antenna and other projecting parts)
Weight (g)			250g
Installation environment	Input voltage range		12 to 24VDC±5%
	Rated 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 to 50℃
	Operating ambient humidity		10 to 90%RH (No condensation)
	Floating dust particles		Tolerant of small amounts (non-excessive)
	Corrosive gases		None

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

6.5 NZ2WL-KR

Item			Specifications
Wired LAN	Ethernet standards		IEEE802.3 (10BASE-T) IEEE802.3u (100BASE-TX)
	Data transfer speed		10/100Mbps
	Access method		CSMA/CD
	Communication method		Half Duplex, Full Duplex
	Number of effective ports		1 (10BASE-T/100BASE-TX)
Wireless LAN	IEEE802.11a	Transmission format	IEEE802.11a-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	36, 40, 44, 149, 153, 157, 161ch
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	IEEE802.11b-compliant DSSS
		Channel	13ch (1 to 13ch)
		Data transfer speed[*1]	11, 5.5, 2, 1Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	13ch (1 to 13ch)
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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) × 68 (D) × 97 (H) (Not including antenna and other projecting parts)
Weight (g)			250g
Installation environment	Input voltage range		12 to 24VDC±5%
	Rated 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 to 50℃
	Operating ambient humidity		10 to 90%RH (No condensation)
	Floating dust particles		Tolerant of small amounts (non-excessive)
	Corrosive gases		None

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

6.6 NZ2WL-TW

Item			Specifications
Wired LAN	Ethernet standards		IEEE802.3 (10BASE-T) IEEE802.3u (100BASE-TX)
	Data transfer speed		10/100Mbps
	Access method		CSMA/CD
	Communication method		Half Duplex, Full Duplex
	Number of effective ports		1 (10BASE-T/100BASE-TX)
Wireless LAN	IEEE802.11a	Transmission format	IEEE802.11a-compliant OFDM (Orthogonal Frequency Division Multiplexing)
		Channel	149, 153, 157, 161, 165ch
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	IEEE802.11b-compliant DSSS
		Channel	11ch (1 to 11ch)
		Data transfer speed[*1]	11, 5.5, 2, 1Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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	11ch (1 to 11ch)
		Data transfer speed[*1]	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
		Access method	CSMA/CA + ACK (RTS/CTS)
		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) × 68 (D) × 97 (H) (Not including antenna and other projecting parts)
Weight (g)			250g
Installation environment	Input voltage range		12 to 24VDC±5%
	Rated 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 to 50℃
	Operating ambient humidity		10 to 90%RH (No condensation)
	Floating dust particles		Tolerant of small amounts (non-excessive)
	Corrosive gases		None

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

7   Industrial wireless LAN adapter available on the market (applicable product)

An industrial wireless LAN adapter that is available on the market and can be connected to a programmable controller or HMI is listed in 7.1. For the production state of the adapter, contact its manufacturer.

Applicable product: A product that satisfies the interface specifications of the modules manufactured by Mitsubishi Electric Corporation.

Note that we do not conduct a verification of the applicable product. Before using this product, examine the applicability and confirm that it will not cause system operation problems. In addition, follow the specifications of the applicable product when using it.

7.1   Industrial wireless LAN adapter

Current model[1]	Applicable model name	Applicable product manufacturer
NZ2WL-JPA	AWK-3131A-JP	Moxa Inc.
NZ2WL-JPS	AWK-3131A-JP	
NZ2WL-US	AWK-3131A-US	
NZ2WL-CN	AWK-3131A-US[2] AWK-3131A-EU[2]	
NZ2WL-KR	AWK-3131A-US[2] AWK-3131A-EU[2]	
NZ2WL-TW	AWK-3131A-US[2] AWK-3131A-EU[2]	

[1] The current models do not support IEEE802.11n. When the current models communicate with an applicable product, do not set IEEE802.11n to the product.

[2] Use the specified channel for each country. (Refer to the following "7.2 The list of channel for the current model")

7.2   The list of channel for the current models

Standard	Channel						
	Japan[1]		The United States[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 to 14ch)		11ch (1 to 11ch)	13ch (1 to 13ch)	13ch (1 to 13ch)	13ch (1 to 13ch)	11ch (1 to 11ch)
IEEE802.11g	13ch (1 to 13ch)						

[1] These products can use only their own countries.

[2] The products support both access points and stations. They can be switched by the setting.

REVISIONS

Version	Date of Issue	Revision
-	October 2017	First edition
A	March 2019	Available for e-Manual Viewer

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