

IEEE802.11ax/ac/n/a/b/g
Wireless LAN Access Point, External Antenna
(Access Point / Station)

FXA5020 Series

FXA5020-US FXA5020-EU
FXA5020-KR FXA5020-TW



* Specifications, color and design of the products are subject to change without notice.

Features

Wi-Fi 6E (IEEE 802.11ax) compliant high-speed and low-latency communication

(2.4 GHz and 5 GHz can bands be used simultaneously)

Effective throughput is greatly improved, and data transmission and reception is 2.8 times faster (2.4Gbps) than Wi-Fi 5 (800Mbps). New technologies such as OFDMA(Orthogonal Frequency Division Multiple Access) and MU-MIMO (Multi-User MIMO) have been implemented, greatly improving throughput degradation and delays that occur when many satellite stations are used simultaneously. The use of the conventional 2.4 GHz and 5 GHz bands reduces radio interference, enabling a faster and more stable communication environment. In addition, the 2.4 GHz and 5 GHz bands can be used simultaneously.

Mesh Wi-Fi network

The wireless mesh network function allows a single network group (ESSID) to be configured by multiple access points in a mesh pattern. Even if a failure occurs in any part of the communication path, the network can be built resistant to failures, such as automatically securing the best alternative path and maintaining communication connections. Wireless connections between access points make it easy to expand the communication area by simply increasing the number of access points.

Smart Roaming (Duplex)

Dual Station Mode is installed to extend communication from one wireless connection to two wireless connections. If one wireless connection is lost, data communication will not be lost while roaming because another wireless connection is available. Contec's unique tuning for "uninterruptible wireless LAN" enables high-dimensional roaming.

Supports a various power supply

This product supports an AC adapter (sold separately), DC power supplies from 5 to 30 VDC, and power supplied from the LAN connector.

This product can be switched between access point, station (client), and repeater operation modes

By switching the operation mode, you can use this product as not only an access point but also as a station (client) and a repeater. You can use this product as a wireless LAN converter for a wired LAN device. You can also use both 5 GHz and 2.4 GHz interfaces simultaneously in Dual Station Mode.

This product is a wireless LAN access point that complies with IEEE802.11ax/ac/n/a/b/g wireless LAN standard and supports wide input power (5 - 30 VDC) and PoE.

It has various functions such as smart roaming (duplex) and mesh Wi-Fi network support, and offers advanced security, stable communication, and excellent maintainability.

By switching modes, it can be used not only as an access point (master station) but also as a station (slave station) or repeater. It can be used as an access point or repeater.

In Dual Station Mode, you can use both 5 GHz and 2.4 GHz interfaces simultaneously.

Light weight and compact design enables a smart installation with included magnets and tapping screws.

This product is supported with a connector protection cover and a security slot for theft proof.

- * The contents in this document are subject to change without notice.
- * Visit the CONTEC website to check the latest details in the document.
- * The information in the data sheets is as of March, 2026.

The proprietary encryption technology "WSL" that is available along with WPA3/WPA2/WPA and WEP.

In addition to the certifications for advanced security standards WPA3/WPA2/WPA and IEEE802.1X, this product is also equipped with our proprietary encryption technology "WSL", which can be used at the same time as these certifications. MAC address filtering and ESSID hiding are also supported.

Features variety of functions, including VLAN and a virtual AP function

This product is equipped with a VLAN function for constructing virtual networks and a virtual AP function for operating one AP as multiple virtual APs with different security settings. Also, large capacity event logs can be saved.

Suitable for flat, wall, ceiling, and other installation environments

With PoE power, you can install it in places that are hard to reach from a power outlet. The included magnets, tapping screws, and optional mounting brackets make it possible to install it in places with good visibility and easy access to radio waves (walls, ceilings, etc.).

Supported with a connector protection cover and security wire connection configuration

This product can be protected from theft by protecting connectors with included connector cover and attaching a security wire to security slot.

Included Items

FXA5020-US, FXA5020-TW

Main Unit... 1 *1
Magnet ... 2
Tapping Screws (M4 x 2)... 2
Antenna ... 2
Please read the following ... 1
Setup Guide ... 1

*1 Connector cover (Installed in unit)

FXA5020-KR, FXA5020-EU

Main Unit... 1 *1
Magnet ... 2
Tapping Screws (M4 x 2)... 2
Antenna ... 2
Please read the following ... 1
Setup Guide ... 1
Simplified EU Declaration of Conformity...1 (only FXA5020-EU)

*1 Connector cover (Installed in unit)

Optional Products

Item	Model	Description
AC adapter *1	FX-AC053	AC adapter (5VDC, 3A)
	POA201-10-2	AC adapter (12VDC, 1A)
Wall/ceiling installation bracket	FX-BRA20	
PoE power supply unit *1	POW-CB50AF	PoE power supply unit that supports Gigabit Ethernet
	POW-CB60AT2	PoE power supply unit that supports Gigabit Ethernet
	POW-CB70AT	PoE power supply unit that supports Gigabit Ethernet

* Since FX-AC053 is a product for Japan, it may not be usable outside of Japan.

* Visit the CONTEC website for the latest optional products.

Specifications

Function specification

Item	FXA5020-US, FXA5020-KR, FXA5020-EU, FXA5020-TW
Unit Type	Single Station/Access point/Repeater/ Dual Station/Mesh
Wired LAN	
Ethernet standard	IEEE802.3 (10BASE-T), IEEE802.3u (100BASE-TX), IEEE802.3ab (1000BASE-T), IEEE802.3af
Port Speed/Type/Port Number	10/100/1000Mbps / Half Duplex, Full Duplex / 1
Wireless LAN	
Security	
IEEE802.11ax/ac/n	WPA(AES), WPA2(AES), WPA3, WPA3 192bit, WPA-PSK(AES), WPA2-PSK(AES), WPA3-SAE, WSL(combination mentioned above are possible)
IEEE802.11a/b/g	WEP(Open/Shared Key) *1, WPA(AES, TKIP), WPA-PSK(AES,TKIP), WPA2(AES, TKIP), WPA2-PSK(AES,TKIP), WPA3, WPA3 192bit, WPA3-SAE, IEEE802.1X(EAP-TLS, PEAP), WSL(combination mentioned above are possible)
Antenna	FXA5020-US: Dipole Antenna 5.3dBi(2.4GHz), 4.5dBi(5GHz) x 2 FXA5020-KR Dipole Antenna 2.5dBi(2.4GHz), 3.2dBi(5GHz) x 2
External Dimensions (mm)	Unit only: 136.2(W) x 117.4(D) x 31.0(H) including power cable disconnection prevention hook With connector cover and Antenna attached is referred to the external dimensions diagram.
Weight	400g

*1 WEP encryption for access points only.

FXA5020-US 5GHz, 2.4GHz Interface Specifications

Item	FXA5020-US	
5GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11ac, IEEE802.11n, IEEE802.11a	
Band Width	20/40/80/160MHz	
The number of Connectable Devices	512	
Chanell	5GHz: 25ch(36, 40, 44, 48ch, 52, 56, 60, 64ch, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144ch, 149, 153, 157, 161, 165ch)	
Data transmission speed *2	IEEE802.11ax	2402 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11ac	866 - 7.2Mbps [MCS0 - 9, Short/Long GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11a	54, 48, 36, 24, 18, 12, 9, 6Mbps
2.4GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11n, IEEE802.11b, IEEE802.11g	
Band Width	20/40MHz	
The number of Connectable Devices	128	
Chanell	11ch (1 - 11)	
Data transmission speed *2	IEEE802.11ax	574 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11g	54, 48, 36, 24, 18, 12, 9, 6Mbps
	IEEE802.11b	11, 5.5, 2, 1Mbps

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

FXA5020-KR 5GHz, 2.4GHz Interface Specifications

Item	FXA5020-KR	
5GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11ac, IEEE802.11n, IEEE802.11a	
Band Width	20/40/80MHz	
The number of Connectable Devices	512	
Chanell	5GHz: 19ch(36, 40, 44, 48ch, 52, 56, 60, 64ch, 100, 104, 108, 112, 116, 120, 124ch, 149, 153, 157, 161ch)	
Data transmission speed *1	IEEE802.11ax	1201 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11ac	866 - 7.2Mbps [MCS0 - 9, Short/Long GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11a	54, 48, 36, 24, 18, 12, 9, 6Mbps
2.4GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11n, IEEE802.11b, IEEE802.11g	
Band Width	20/40MHz	
The number of Connectable Devices	128	
Chanell	13ch (1 - 13)	
Data transmission speed *1	IEEE802.11ax	574 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11g	54, 48, 36, 24, 18, 12, 9, 6Mbps
	IEEE802.11b	11, 5.5, 2, 1Mbps

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

FXA5020-EU 5GHz, 2.4GHz Interface Specifications

Item	FXA5020-EU	
5GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11ac, IEEE802.11n, IEEE802.11a	
Band Width	20/40/80/160MHz	
The number of Connectable Devices	512	
Chanell	5GHz: 19ch(36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140)	
Data transmission speed *2	IEEE802.11ax	2402 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11ac	866 - 7.2Mbps [MCS0 - 9, Short/Long GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11a	54, 48, 36, 24, 18, 12, 9, 6Mbps
2.4GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11n, IEEE802.11b, IEEE802.11g	
Band Width	20/40MHz	
The number of Connectable Devices	128	
Chanell	13ch (1 - 13)	
Data transmission speed *2	IEEE802.11ax	574 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11g	54, 48, 36, 24, 18, 12, 9, 6Mbps
	IEEE802.11b	11, 5.5, 2, 1Mbps

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

FXA5020-TW 5GHz, 2.4GHz Interface Specifications

Item	FXA5020-TW	
5GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11ac, IEEE802.11n, IEEE802.11a	
Band Width	20/40/80/160MHz	
The number of Connectable Devices	512	
Chanell	5GHz: 25ch(36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165ch)	
Data transmission speed *2	IEEE802.11ax	2402 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11ac	866 - 7.2Mbps [MCS0 - 9, Short/Long GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11a	54, 48, 36, 24, 18, 12, 9, 6Mbps
2.4GHz		
Wireless Standard	IEEE802.11ax, IEEE802.11n, IEEE802.11b, IEEE802.11g	
Band Width	20/40MHz	
The number of Connectable Devices	128	
Chanell	13ch (1 - 13)	
Data transmission speed *2	IEEE802.11ax	574 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]
	IEEE802.11n	300 - 6.5Mbps [MCS0 - 15, Short/Long GI]
	IEEE802.11g	54, 48, 36, 24, 18, 12, 9, 6Mbps
	IEEE802.11b	11, 5.5, 2, 1Mbps

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

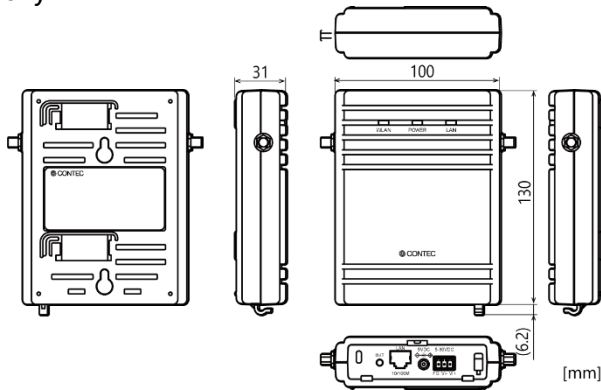
Installation Environment Requirements

Item	FXA5020-US	FXA5020-KR	FXA5020-EU	FXA5020-TW
Input voltage range	5VDC±5% (DC Jack), 5 - 30VDC±5% (Power Connector), 36 - 57VDC(PoE)			
Rating input current	1.87A(5V DC input), 0.78A(12V DC input), 0.39A(24V DC input), 0.32A(30V DC input), 0.26A(PoE input 48V) (Max)			
Operating ambient temperature	PoE input	-20 - +35°C (without wind) -20 - +45°C (with air flow 0.6m/s)		
	DC input	-20 - +45°C (without wind) -20 - +50°C (with air flow 0.6m/s)		
Operating ambient humidity	10 - 90%RH (No condensation)			
Floating dust particles	Not extreme			
Corrosive gases	None			
Line-noise resistance *3	Line noise	AC Power Line /±2kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3), Signal Line /±1kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)		
	Static electricity resistance	Touch /±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2), Air /±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)		
Vibration resistance	Sweep resistance	10 - 57Hz /semi-amplitude vibration 0.035mm, 57 - 150Hz/0.5G 40minutes each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant)		
Shock resistance	10G half-sine shock for 11ms in X, Y, and Z directions (JIS C 60068-2-27 -compliant, IEC 60068-2-27 -compliant)			
Standard	FCC Class A IMDA, UL	KC	CE, UKCA	NCC

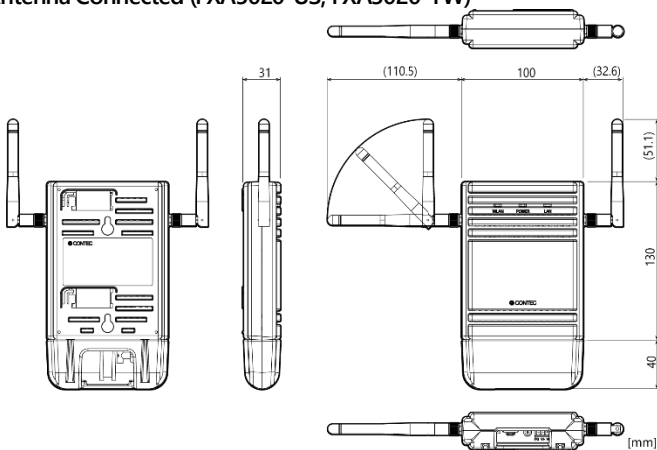
*3 Check with optional AC adapter FX-AC053.

Physical Dimensions

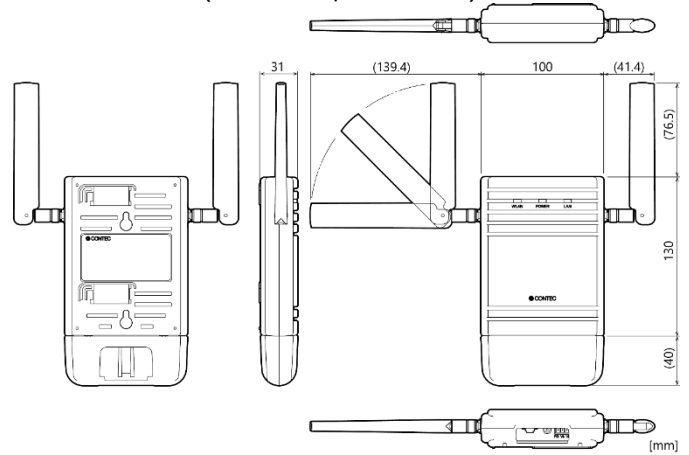
Unit only



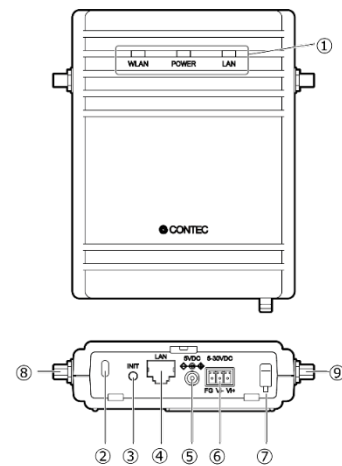
Antenna Connected (FXA5020-US, FXA5020-TW)



Antenna Connected (FXA5020-KR, FXA5020-EU)



Component Name



No.	Title	Function
1	LED display	This is an LED that indicates the status of the unit.
2	Security slot	A commercially available security wire can be attached.
3	INIT Switch	This switch is used to initialize the unit.
4	LAN port	Connect the LAN cable to the PC.
5	DC JACK	This is the jack for DC power.
6	Power connector	Connect this to the power connector when supplying power from an external source.
7	Power disconnection prevention hook	This is the hook for preventing the power cable from coming off.
8	Antenna connector	This is the connector for antenna connection.

Differences from FXA3000-EU

The FXA5020-EU has the following main differences from the previous FXA3000-EU:

Title	FXA5020-EU	FXA3000-EU	
Unit Type	Single Station/Access point/Repeater/ Dual Station/Mesh	Access point/ Station /Repeater	
Wired LAN			
Ethernet standard	IEEE802.3(10BASE-T), IEEE802.3u(100BASE-TX), IEEE802.3ab(1000BASE-T), IEEE802.3af	IEEE802.3(10BASE-T), IEEE802.3u(100BASE-TX), IEEE802.3af	
Port Speed/ Type/Port Number	10/100/1000Mbps/Half Duplex, Full Duplex/1	10/100Mbps/Half Duplex, Full Duplex/1	
Wireless Standard	IEEE802.11ax, IEEE802.11ac, IEEE802.11n, IEEE802.11a, IEEE802.11b, IEEE802.11g	IEEE802.11n, IEEE802.11a, IEEE802.11b, IEEE802.11g	
IEEE802.11ax			
Channel	2.4GHz : 13ch (1-13ch) 5GHz : 19ch ((36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140ch)	-	
Data transmission speed	2402 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]	-	
IEEE802.11ac			
Channel	5GHz: 19ch (36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140ch)	-	
Data transmission speed	866 - 7.2Mbps [MCS0 - 9, Short/Long GI]	-	
Security	IEEE802.11ax/ac/n : WPA(AES), WPA2(AES), WPA3, WPA3 192bit, WPA-PSK(AES), WPA2-PSK(AES), WPA3-SAE, WSL (combination mentioned above are possible) IEEE802.11a/b/g : WEP(Open/ Shared Key)*2, WPA(AES, TKIP), WPA-PSK(AES,TKIP), WPA2(AES, TKIP), WPA2-PSK(AES,TKIP), WPA3, WPA3 192bit, WPA3-SAE, IEEE802.1X(EAP-TLS, PEAP), WSL (combination mentioned above are possible)	IEEE802.11n : WPA(AES), WPA2(AES), WPA-PSK(AES), WPA2-PSK(AES), WSL(combination mentioned above are possible) IEEE802.11a/b/g : WEP(Open/ Shared Key/Auto), WPA(AES, TKIP), WPA-PSK(AES, TKIP), WPA2(AES, TKIP), WPA2-PSK(AES, TKIP), IEEE802.1X(EAP-TLS, PEAP), WSL(combination mentioned above are possible)	
Input voltage range	5VDC±5% (DC Jack), 5 - 30VDC±5% (Power Connector), 36 - 57VDC (PoE)		
Rating input current	1.87A (5VDC input), 0.78A (12VDC input), 0.39A (24VDC input), 0.32A (30VDC input), 0.26A (PoE 48V) (Max.)	0.83A (5VDC input), 0.15A (30VDC input) (Max.), 0.13A (PoE 48V)	
Operating ambient temperature	PoE input (without wind)	-20 - +35°C	0 - 40°C
	PoE input (with air flow 0.6m/s)	-20 - +45°C	
	DC input (without wind)	-20 - +45°C	
	DC input (with air flow 0.6m/s)	-20 - +50°C	

- Wireless LAN devices may not operate normally due to factors such as the installation environment, the settings of the unit, and the communication load of the network system. Confirm that there are no problems by performing a verification in advance in an environment suitable for your use. When installing or installing wireless LAN devices ask a specialist such as a system integrator who is familiar with the construction of wireless LAN network systems.
- When replacing this product (FLEXLAN 5000 series) with another series of wireless LAN devices (FLEXLAN 4000/3000/2000/1000/DS540 series etc.), it may be necessary to rebuild the network system due to differences in product specifications and functions. When using this product, we recommend that you thoroughly evaluate the product in the environment in which it will be used by using a our company lending machine.

Differences from FXA3000-TW

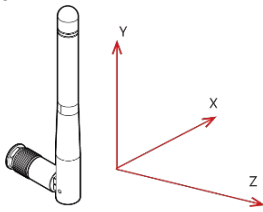
The FXA5020-TW has the following main differences from the previous FXA3000-TW:

Title	FXA5020-TW	FXA3000-TW	
Unit Type	Single Station/Access point/Repeater/ Dual Station/Mesh	Access point/ Station /Repeater	
Wired LAN			
Ethernet standard	IEEE802.3(10BASE-T), IEEE802.3u(100BASE-TX), IEEE802.3ab(1000BASE-T), IEEE802.3af	IEEE802.3(10BASE-T), IEEE802.3u(100BASE-TX), IEEE802.3af	
Port Speed/ Type/Port Number	10/100/1000Mbps/Half Duplex, Full Duplex/1	10/100Mbps/Half Duplex, Full Duplex/1	
Wireless Standard	IEEE802.11ax, IEEE802.11ac, IEEE802.11n, IEEE802.11a, IEEE802.11b, IEEE802.11g	IEEE802.11n, IEEE802.11a, IEEE802.11b, IEEE802.11g	
IEEE802.11ax			
Channel	2.4GHz : 13ch (1-13ch) 5GHz : 25ch(36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165ch)	-	
Data transmission speed	2402 - 0.9Mbps [MCS0 - 11, 0.8us/1.6us/3.2us GI]	-	
IEEE802.11ac			
Channel	5GHz : 25ch(36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144, 149, 153, 157, 161, 165ch)	-	
Data transmission speed	866 - 7.2Mbps [MCS0 - 9, Short/Long GI]	-	
Security	IEEE802.11ax/ac/n : WPA(AES), WPA2(AES), WPA3, WPA3 192bit, WPA-PSK(AES), WPA2-PSK(AES), WPA3-SAE, WSL(combination mentioned above are possible) IEEE802.11a/b/g : WEP(Open/ Shared Key/Auto), WPA(AES, TKIP), WPA-PSK(AES,TKIP), WPA2(AES, TKIP), WPA2-PSK(AES,TKIP), WPA3, WPA3 192bit, WPA3-SAE, IEEE802.1X(EAP-TLS, PEAP), WSL(combination mentioned above are possible)	IEEE802.11n : WPA(AES), WPA2(AES), WPA-PSK(AES), WPA2-PSK(AES), WSL(combination mentioned above are possible) IEEE802.11a/b/g : WEP(Open/ Shared Key/Auto), WPA(AES, TKIP), WPA-PSK(AES,TKIP), WPA2(AES, TKIP), WPA2-PSK(AES,TKIP), IEEE802.1X(EAP-TLS, PEAP), WSL(combination mentioned above are possible)	
Input voltage range	5VDC±5% (DC Jack), 5 - 30VDC±5% (Power Connector), 36 - 57VDC (PoE)		
Rating input current	1.87A (5VDC input), 0.78A (12VDC input), 0.39A (24VDC input), 0.32A (30VDC input), 0.26A (PoE 48V) (Max.)	0.83A (5VDC input), 0.15A (30VDC input) (Max.), 0.13A (PoE 48V)	
Operating ambient temperature	PoE input (without wind)	-20 - +35°C	0 - 40°C
	PoE input (with air flow 0.6m/s)	-20 - +45°C	
	DC input (without wind)	-20 - +45°C	
	DC input (with air flow 0.6m/s)	-20 - +50°C	

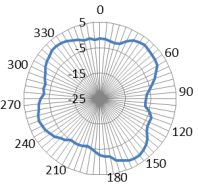
- Wireless LAN devices may not operate normally due to factors such as the installation environment, the settings of the unit, and the communication load of the network system. Confirm that there are no problems by performing a verification in advance in an environment suitable for your use. When installing or installing wireless LAN devices ask a specialist such as a system integrator who is familiar with the construction of wireless LAN network systems.
- When replacing this product (FLEXLAN 5000 series) with another series of wireless LAN devices (FLEXLAN 4000/3000/2000/1000/DS540 series etc.) it may be necessary to rebuild the network system due to differences in product specifications and functions. When using this product, we recommend that you thoroughly evaluate the product in the environment in which it will be used by using a our company lending machine.

Antenna

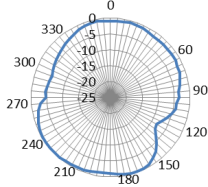
FXA5020-US, FXA5020-TW



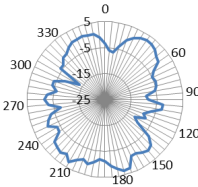
5.5GHz_{XY}



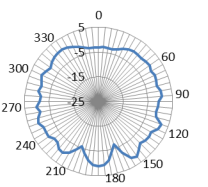
2.4GHz_{XY}



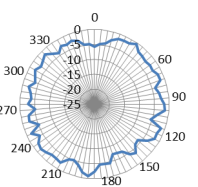
5.5GHz_{XZ}



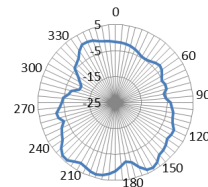
2.4GHz_{XZ}



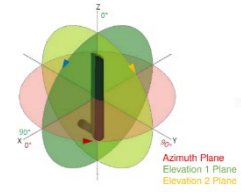
5.5GHz_{YZ}



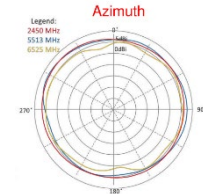
2.4GHz_{YZ}



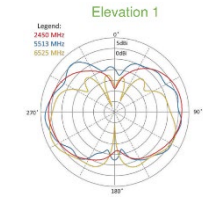
FXA5020-KR, FXA5020-EU



XY



XZ



YZ

