IEEE802.11n/a/b/g
Wireless LAN (Access point / Station)
FXA3000 Series

FXA3000-US   FXA3000-EU
FXA3000-TW   FXA3000-KR

  The FXA3000 Series is an access point that conforms to IEEE 802.11n/a/b/g wireless networking standards and that supports a wide range of input power (5 to 30 VDC) and PoE.

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.

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

Features

Compatible with 4 standards, IEEE802.11n/a/b/g
You can choose 24 ch (W52/W53/W56/W58 *1) in the 5 GHz (IEEE802.11n/a), and in the 2.4 GHz (IEEE802.11n/b/g), you can choose from 1 to 13ch *2. So, it is possible to design a flexible wireless network to adjust a radio wave interference.

Light weight and compact design for installation setting and sophisticated appearance
Compatible with PoE and include an antenna inside chassis considering installation setting and sophisticated appearance. This product can be used at variety of setting using included magnets and tapping screws.

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 (master station), station (slave station), and repeater operation modes.
By switching the operation mode, you can use this product as not only an access point (a master station) but also as a station (a slave station) and a repeater. You can use this product as a wireless LAN converter for a wired LAN device.

The proprietary encryption technology "WSL" that is available along with WPA2/WPA and WEP.
In addition to the certifications for advanced security standards 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 (with approximately 15,000 events, which is 7 times our conventional products) can be saved.

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.

*1 : W52: 36, 40, 44, 48ch / W53: 52, 56, 60, 64ch / W56: 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140ch / W58: 149, 153, 157, 161, 165ch
      Supported channels are different depending on the country in which the product is used.
*2 : Supported channels are different depending on the country in which the product is used.

Specification

Function specification

Name		Specification
Unit Type		Access point / Station / Repeater
Wired LAN		
	Ethernet standard	IEEE802.3(10BASE-T), IEEE802.3u(100BASE-TX), IEEE802.3af
	Port Speed / Communication type / Number of ports	10/100Mbps/Half Duplex, Full Duplex / 1
Wireless LAN		
	Wireless Networking Standard	IEEE802.11n, IEEE802.11a, IEEE802.11b, IEEE802.11g
	Channel	Varies depending on the country in which the product is used.
IEEE802.11n		
	Data transmission speed *1	300 - 6.5Mbps[MSC0 - 15, Short/Long GI] (Fixed/Auto)
IEEE802.11a		
	Data transmission speed *1	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
IEEE802.11b		
	Data transmission speed *1	11, 5.5, 2, 1Mbps (Fixed/Auto)
IEEE802.11g		
	Data transmission speed *1	54, 48, 36, 24, 18, 12, 9, 6Mbps (Fixed/Auto)
Security		
	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)
Antenna		chip-antenna×2 MIMO
External dimension (mm)		Unit only: 136.2(W) x 100.0(D) x 31.0(H) including power cable disconnection prevention hook With connector cover attached: 170.0(W) x 100.0(D) x 31.0(H)
Weight		220g (Unit only), 250g (With connector cover attached)

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

Installation Environment Requirements

Name		Specification
Input voltage range		5VDC±5% (DC Jack), 5 - 30VDC±5% (power connector), 36 - 57VDC (PoE)
Rating input current		0.83A (5VDC input), 0.15A (30VDC input) (Max.), 0.13A (PoE input 48V)
Operating ambient temperature		0 - 40°C
Operating ambient humidity		10 - 90%RH (No condensation)
Floating dust particles		Not extreme
Corrosive gases		None
Permitted transient power failure		17ms or less (100VAC@25°C) An automatic reset is performed when low voltage is detected.
Approval standards	FXA3000-US	FCC, IC, WPC, IMDA, UL/cUL, RoHS Compliant
	FXA3000-EU	CE Marking (RE, RoHS), NBTC
	FXA3000-TW	NCC, RoHS Compliant
	FXA3000-KR	KC, RoHS Compliant

Packing List

Main unit (One of the followings)
    [FXA3000-US, FXA3000-EU, FXA3000-KR, FXA3000-TW] ...1

Setup Guide * ... 1

Magnet ...1

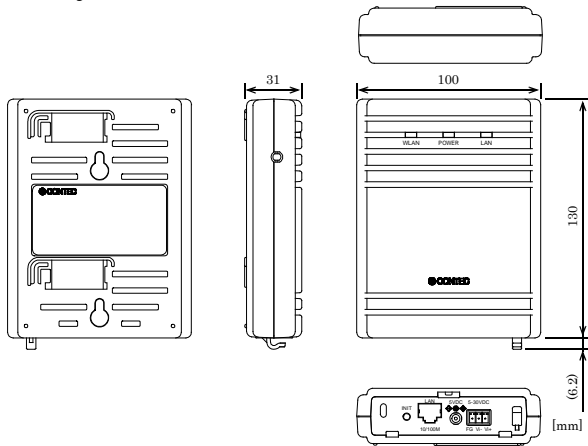Tapping Screws ...2

Connector cover (Installed in unit) ...1

Serial Number Label ...1

CE Declaration ...1 (FXA3000-EU only)

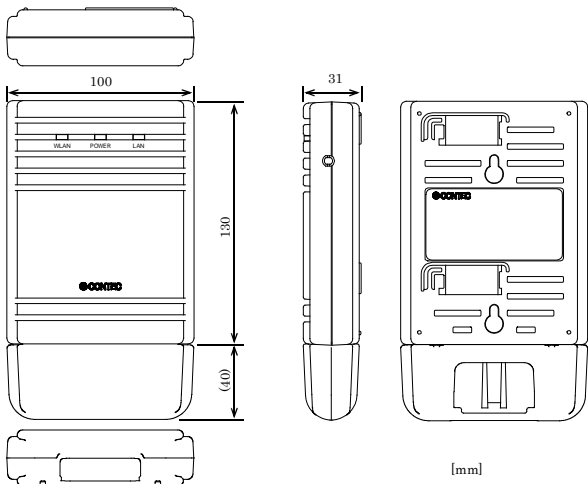* The language of the Setup Guide varies depending on the product.
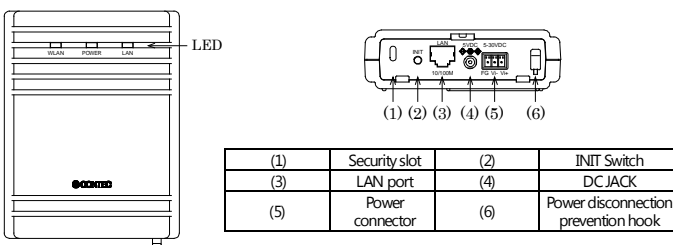
External Dimensions

Unit only

[mm]

Connector cover attached

[mm]

List of Option

FX-AC052:   AC Adapter (Output: +5VDC 2A)
POA-201-10-2:   AC Adapter (Output: +12VDC 1A)
FX-BRA20:   Wall/ceiling installation bracket
POW-CB50AF: PoE Unit for supplying power from the LAN Connector
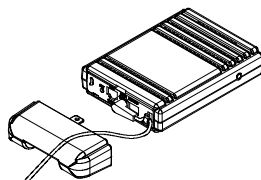POW-CB60AT: PoE power supply unit that supports Gigabit Ethernet

Component Name

(1)	Security slot	(2)	INIT Switch
(3)	LAN port	(4)	DC JACK
(5)	Power connector	(6)	Power disconnection prevention hook

Power Supply

When using the AC adapter (FX-AC052)
Pass the DC plug through the connector cover opening and connect the AC adapter's DC plug to the product's DC jack. You can prevent the DC plug from being pulled out by hooking the cord on the power disconnection prevention hook located on the connector section.
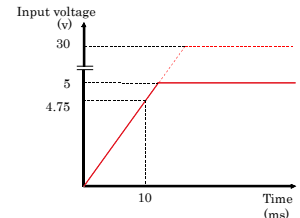

When supplying power from the power connector

Power can be externally supplied using the power connector. Use the components indicated to the followings for the power cable or use equivalent components.

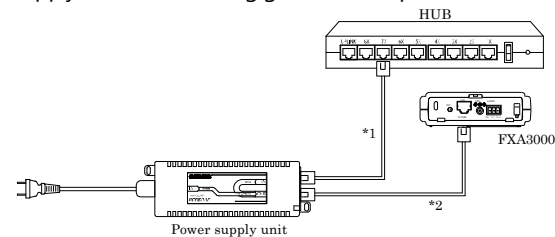| Function			
Power connector: MC1,5/3-ST-3,5(PHOENIX CONTACT), Cable: AWG28-16(on the condition that the cable length satisfies the power specifications)			
Pin No.	Signal name	Meaning	5-30VDC
1	Vi+	Power supply (5 to 30 VDC ±5%)	
2	Vi-	Power supply (GND)	FG Vi- Vi+
3	FG	Frame ground	

⚠ CAUTION

- Carefully manufacture the power cable taking care not to mistake the wiring. In particular, if the power cable is used with mistaken housing pin numbers, there is a risk of malfunction or accidents.
- Input voltage range: 5 to 30 VDC ± 5%. Use a power supply that rises to 4.75 VDC or higher in the input voltage range within 10 ms. There is a risk of damage to the device or accident if a power supply outside this range is used.

When supplying power from the LAN cable

The FXA3000 Series can be power-supplied through a LAN cable from an IEEE802.3af-compliant power supply unit. For details, refer to the power supply unit. The following gives an example of connection.

⚠ CAUTION

- The overall length of the LAN cable between the power supply destination and the hub must be up to 100 m. Route the cabling such that (1) + (2) is 100 (m) or less.
- Do not connect the output LAN cable to any IEEE802.3af non-compliant device as doing so can cause device faults or accidents.

Differences from FXA2000 Series

FXA3000 Series, the higher-grade model of the conventional FXA2000 Series, has the main differences as follows:

	FXA3000 Series	FXA2000 Series
Weight	220g (Unit only), 250g (With connector cover attached)	250g (Unit only), 270g (With connector cover attached)
Rating input current	0.83A (5VDC input), 0.15A (30VDC input) (Max.), 0.13A (PoE input 48V)	1.05A (5VDC input), 0.19A (30VDC input) (Max.), 0.15A (PoE input 48V)

FXA3000 Series in use channel

FXA3000 number of channels that can be used in the Series are as follows.

		Access point / Repeater	Station
FXA3000-US	11b/g/n (2.4G)	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch
	11a/n (5G)	36ch, 40ch, 44ch, 48ch, 149ch, 153ch, 157ch, 161ch, 165ch	36ch, 40ch, 44ch, 48ch, 52ch, 56ch, 60ch, 64ch, 100ch, 104ch, 108ch, 112ch, 116ch, 132ch, 136ch, 140ch, 149ch, 153ch, 157ch, 161ch, 165ch
FXA3000-EU	11b/g/n (2.4G)	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch, 12ch, 13ch	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch, 12ch, 13ch
	11a/n (5G)	36ch, 40ch, 44ch, 48ch, 52ch, 56ch, 60ch, 64ch, 100ch, 104ch, 108ch, 112ch, 116ch, 120ch, 124ch, 128ch, 132ch, 136ch, 140ch	36ch, 40ch, 44ch, 48ch, 52ch, 56ch, 60ch, 64ch, 100ch, 104ch, 108ch, 112ch, 116ch, 120ch, 124ch, 128ch, 132ch, 136ch, 140ch
FXA3000-TW	11b/g/n (2.4G)	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch
	11a/n (5G)	56ch, 60ch, 64ch, 100ch, 104ch, 108ch, 112ch, 116ch, 132ch, 136ch, 140ch, 149ch, 153ch, 157ch, 161ch, 165ch	56ch, 60ch, 64ch, 100ch, 104ch, 108ch, 112ch, 116ch, 132ch, 136ch, 140ch, 149ch, 153ch, 157ch, 161ch, 165ch
FXA3000-KR	11b/g/n (2.4G)	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch, 12ch, 13ch	1ch, 2ch, 3ch, 4ch, 5ch, 6ch, 7ch, 8ch, 9ch, 10ch, 11ch, 12ch, 13ch
	11a/n (5G)	36ch, 40ch, 44ch, 48ch, 52ch, 56ch, 60ch, 64ch, 100ch, 104ch, 108ch, 112ch, 116ch, 120ch, 124ch, 149ch, 153ch, 157ch, 161ch	36ch, 40ch, 44ch, 48ch, 52ch, 56ch, 60ch, 64ch, 100ch, 104ch, 108ch, 112ch, 116ch, 120ch, 124ch, 149ch, 153ch, 157ch, 161ch