WRG1830/ZFR183x Pro Series Wireless Field Bus Coordinator Control Panel Assembly Catalog Page

2023-06-16 LIT-1901179

Description

The WRG1830/ZFR183x Pro Series Wireless Field Bus System control panels provide a predesigned solution that saves time and money. Multiple sized panels are available. Each panel comes with a WRG1830 Wireless Gateway, a ZFR1831 Pro Wireless Coordinator Router, and an ACC-WIFIKIT-0DU Wi- Fi Dongle. Certain models include a Metasys SNE series network engine.

The control panel ships complete and mounted in a NEMA 1 steel enclosure. In addition to the engine, some assemblies contain two 120 VAC outlets, a 96 VA 120/24 VAC transformer, and a power supply with a 5-A circuit breaker. Every panel with an engine includes a five port Ethernet switch with 10 Mbps, 100 Mbps, or 1000 Mbps. The ZFR router is shipped with the panel and must be field-installed outside of the panel. For full details on the complete Wireless Field Bus System, refer to the *WRG1830/ZFR183x Pro Series Wireless Field Bus System Catalog Page (LIT-1901153)*.

For additional NEMA ratings, enclosure materials, and customizations, contact the Custom Panel Group at BE-CustomPanelGroup@jci.com.

Features

- Consistent layout for all standard control panel solutions simplifies installation and commissioning.
- Pre-built, pre-wired, and pre-tested in an ISO-9001 manufacturing facility provides products of consistently high quality.
- California Department of Health Care Access and Information (HCAI) Special Seismic Certification pre-approved control panel assembly meets standards for rigid and flexible mounting conditions to account for unit-mounted and remote-mounted application.

Applications

The wireless products within a BAS system are ideal for any location where it is cost-prohibitive, difficult, or aesthetically unappealing to use a hard wire between BAS products. Examples of these locations include the following:

- Office buildings, university campuses, educational facilities, correctional facilities, and other commercial structures with brick or solid concrete walls or ceilings, that impede hardwired applications.
- Office buildings, retail stores, and other commercial real estate where tenant turnover is frequent and temporary walls and ceilings are common.
- Museums, historical buildings, atriums, and other sites where building aesthetics and historical preservation are important.
- Stadiums, arenas, gymnasiums, convention centers, airports, zoos, and other locations with large, open spaces with wood veneer, or other decorative surfaces that present challenges to hardwiring.
- Buildings with asbestos or other hazardous materials that must not be disturbed.
- Buildings with occupants sensitive to business disruptions.
- Regions with high labor costs.

The WRG1830/ZFR183x Pro Series Wireless Field Bus System is approved by national compliance agencies for use in the United States and Canada. Refer to the *WRG1830/ZFR183x Pro Series Wireless Field Bus System Catalog Page*, LIT-1901153 for full technical specifications

Do not use the wireless BAS products in applications that cannot tolerate intermittent interference or where the following conditions apply:

- Locations or applications that prohibit cellular telephones or Wi-Fi systems.
- Critical control features would affect life safety or result in large monetary loss, including secondary (backup) life-safety applications.
- Data centers, production lines, or critical areas would be shut down.

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- Loss of critical control would result from loss of data from humidity or temperature sensor communications.
- Operation of exhaust fans or Air Handling Units (AHUs) would impair a purge or pressurization mode.
- Missing data would invalidate reporting required by the customer.
- Security points are monitored.

Selection chart

Table 1: Panels for wireless applications (dimensions in W x H x D)

Product code	Description
P2GAN-JA000N00	Control panel, 12 in. x 16 in. x 6.62 in. (305 mm x 406 mm x 168 mm) enclosure, JC-WRG1830-0 Wireless Gateway without power supply, JC-ZFR1831 Wireless Coordinator Router (shipped with the panel), ACCWIFIKIT-0DU Wi-Fi Dongle
P2AAN-JA001N00	Control panel, 16 in. x 20 in. x 6.62 in. (406 mm x 508 mm x 168 mm) enclosure, JC-WRG1830-0 Wireless Gateway, JC-ZFR1831 Wireless Coordinator Router (shipped with the panel), ACCWIFIKIT-0DU Wi-Fi Dongle, 120/ 24 VAC power supply
P2BAN-JAAD1N00	Control panel, 20 in. x 24 in. x 9.25 in. (508 mm x 610 mm x 235 mm) enclosure, JC-WRG1830-0 Wireless Gateway, JC-ZFR1831 Wireless Coordinator Router (shipped with the panel), ACCWIFIKIT-0DU Wi-Fi Dongle, M4-SNE10502-0 Controller, 120/ 24 VAC power supply with 5 port network switch
P2BAN-JAAE1N00	Control panel, 20 in. x 24 in. x 9.25 in. (508 mm x 610 mm x 235 mm) enclosure, JC-WRG1830-0 Wireless Gateway, JC-ZFR1831 Wireless Coordinator Router (shipped with the panel), ACCWIFIKIT-0DU Wi-Fi Dongle, M4-SNE11002-0 Controller, 120/ 24 VAC power supply with 5 port network switch
P2BAN-JAAF1N00	Control panel, 20 in. x 24 in. x 9.25 in. (508 mm x 610 mm x 235 mm) enclosure, JC-WRG1830-0 Wireless Gateway, JC-ZFR1831 Wireless Coordinator Router (shipped with the panel), ACCWIFIKIT-0DU Wi-Fi Dongle, M4-SNE22002-0 Controller, 120/ 24 VAC power supply with 5 port network switch

Technical specifications

Table 2: Technical specifications (dimensions in W x H x D)

Specification	Description	
Enclosure rating	NEMA 1	
Enclosure finish	ANSI 61 gray polyester powder coating for the perforated panel and enclosure	
Dimensions (Width x Height x Depth)	P2GAN-JA000N00	12 in. x 16 in. x 6.62 in. (305 mm x 407 mm x 168 mm)
	P2AAN-JA001N00	16 in. x 20 in. x 6.62 in. (406 mm x 508 mm x 168 mm)
	P2BAN-JAAx1N00	20 in. x 24 in. x 9.25 in. (508 mm x 610 mm x 235 mm)
Weight	P2GAN-JA000N00	23 lbs (10.4 kg)
	P2AAN-JA001N00	33 lbs (15 kg)
	P2BAN-JAAx1N00	48 lbs (21.8 kg)

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Table 2: Technical specifications (dimensions in W x H x D)

Specification	Description	
Locking method	P2GAN-JA000N00	Keyed lock and two keys included
	P2AAN-JA001N00	
	P2BAN-JAAx1N00	
Agency compliance	Control Panel: UL 508A, UL50 Rated Enclosure, cUL -CAN/CSA C22.2 No. 14-05, HCAI Special Seismic Certification pre-approval: OSP-0140-10 California Building Code (CBC) - 2013, International Building Code (IBC) - 2012 Seismic Performance Characteristics SDS(G) + 2.26 z/h = 1.0, Ip = 1.5	

Note: For the full technical specifications of the WRG1830/ZFR183x Pro Series Wireless Field Bus System as well as regional sales information refer to *WRG1830/ZFR183x Pro Series Wireless Field Bus System Catalog Page (LIT-1901153)*

Repair information

If the control panel assembly fails to operate within its specifications, replace the unit. For a replacement assembly, contact the nearest Johnson Controls representative.

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Software terms

Use of the software that is in (or constitutes) this product, or access to the cloud, or hosted services applicable to this product, if any, is subject to applicable end-user license, open-source software information, and other terms set forth at www.johnsoncontrols.com/techterms. Your use of this product constitutes an agreement to such terms.

Patents

Patents: https://jcipat.com

Single point of contact

APAC	EU	UK	NA/SA
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Contact information

Contact your local Johnson Controls representative:
www.johnsoncontrols.com/locations

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