INET-IOEX-RYIO

infiNET EX® Wireless Relay/Digital Input Control Module

> A low-cost wireless control interface

> Eliminates the need to run wire or install conduit

> Provides two relay and two digital input control ports [2]

> Communicates via the infiNET EX® wireless network

> Compatible with Crestron® 2-Series and 3-Series® control systems

> Ultra-compact, surface mount design

Every installer knows — running wires is a challenge and it adds substantial cost to any project. Crestron® infiNET EX® technology offers a wireless solution for controlling many devices in a home or commercial facility, eliminating the need to cut into walls, fish through insulation, or install expensive conduit just to get a wire to each device.

The INET-IOEX-RYIO is a very compact and low-cost wireless device that is perfect for use in retrofits, historic buildings, rental homes and offices, or any budget-conscious application. It provides a low-voltage relay and digital input control interface for remote devices such as garage door openers, sensors, and motorized screens. It includes two isolated relays and two digital input ports, and communicates with a Crestron control system via the infiNET EX wireless network, enabling control and monitoring of the remote equipment without having to run wires through walls and ceilings.[1,2]

Please note: The INET-IOEX-RYIO is compatible with 2-Series and 3-Series® control systems.

infiNET EX®

Ultra-reliable infiNET EX wireless technology provides steadfast 2-way RF communications throughout a residential or commercial structure without the need for physical control wiring. Employing a 2.4 GHz mesh network topology, each infiNET EX device functions as an expander, passing command signals through to every other infiNET EX device within range (approximately 150 feet or 46 meters indoors), ensuring that every command reaches its intended destination without disruption.[3]

The INET-IOEX-RYIO communicates with a Crestron control system via an infiNET EX Wireless Gateway (model CEN-GWEXER, DIN-AP3MEX, or MC3 [4]). Up to 100 infiNET EX devices may coexist on a single wireless network, and every device that is added to the network effectively increases the range and stability of the entire network by providing multiple redundant signal paths.[3]

Surface Mount

The INET-IOEX-RYIO is designed to be mounted to a flat surface, located near the equipment that it is controlling or monitoring. Care should be taken when positioning the device to avoid interference from nearby RF devices, obstructions, and metal surfaces. It is powered by an outlet-mounted universal 100-240 Volt AC power pack (included).

SPECIFICATIONS

Wireless Communications

RF Transceiver: infiNET EX 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), default channel 15; IEEE 802.15.4 compliant
Range (typical): 150 ft (46 m) indoor, 250 ft (76 m) outdoor, to nearest mesh network device(s); subject to site-specific conditions and individual device capabilities [3]
Gateway: Requires an infiNET EX gateway [4]

Connectors

R1 – R2: (1) 4-pin 3.5 mm detachable terminal block;
Comprises (2) normally open, isolated relays;
Rated 1 Amp, 30 Volts AC/DC;
MOV Solid-state arc suppression across contacts

1/2/G: (1) 3-pin 3.5 mm detachable terminal block;
Comprises (2) programmable digital inputs (referenced to GND);
Input Voltage Range: 0-24 Volts DC;
Logic Threshold: ≥1.9 Volts DC high, ≤0.8 Volt DC low;
Input Impedance: 2.2k Ohms pulled up to 5 Volts

PWR 5/G: (1) 2-pin 3.5 mm detachable terminal block;
5 Volt DC power input (power pack included)

Controls & Indicators

PWR: (1) Bi-color LED, yellow indicates operating power supplied from power pack, green indicates device is ready
NET: (1) Amber LED, indicates communication with the wireless gateway
RLY 1 – 2: (2) Green LEDs, indicate when each corresponding relay is closed
IN 1 – 2: (2) Green LEDs, indicate a low logic signal on each corresponding digital input port
SETUP: (1) Red LED and (1) recessed pushbutton used to link the module to the wireless gateway

CRESTRON

INET-IOEX-RYIO – Front, Top, & Rear Views (left to right)

Power Requirements

Power Pack (included): Input: 100-240 Volts AC, 50/60Hz
Output: 1.2 Amps @ 5 Volts DC
Model: PW-0510WUL

Environmental

Temperature: 32° to 113° F (0° to 45° C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 3 BTU/hr

Construction

Plastic, black, (2) integral surface mounting flanges, vented sides

Dimensions

Height: 0.68 in (18 mm)
Width: 2.58 in (66 mm)
Depth: 2.49 in (64 mm)

Weight

1.7 oz (46 g)

MODELS & ACCESSORIES

Available Models

INET-IOEX-RYIO: infiNET EX® Wireless Relay/Digital Input Control Module

Included Accessories

PW-0510WUL: Wall Mount Power Pack, 5VDC, 1.2A, Flying Leads, Universal (Qty. 1 included)

Available Accessories

CEN-GWEXER: infiNET EX® & ER Wireless Gateway
MC3: 3-Series® Control System w/infiNET EX® & ER Wireless Gateway
DIN-AP3MEX: DIN Rail 3-Series® Automation Processor w/infiNET EX® & ER Wireless Gateway
CLW-EXPEX: infiNET EX® Wireless Expander
GLA-EXPEX: Crestron Green Light® Wireless Expander for infiNET EX® Networks

Notes:

1. The INET-IOEX-RYIO is compatible with 2-Series and 3-Series control systems.
2. A small amount of delay may be normal when sending or receiving some control commands depending upon the size of the wireless network. Larger networks with many devices tend to exhibit more delay.
3. Any infiNET EX device that provides expander functionality will effectively extend the range of the wireless network beyond the initial range of the gateway. Battery-powered infiNET EX devices do not provide expander functionality. Crestron also offers dedicated infiNET EX expanders (models CLW-EXPEX or GLA-EXPEX, sold separately), which may be deployed to fill gaps in coverage and extend the wireless range of the mesh network. Up to 100 infiNET EX devices are permitted per gateway, although best practices suggest a limit of approximately 50. Additional gateways may be deployed to support more devices, with a maximum of 16 gateways permitted on a complete system (RF conditions allowing).
4. Item(s) sold separately.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Crestron Electronics, Inc. 15 Volvo Drive | Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 | Fax: 201.767.1903
www.crestron.com

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