INET-IOEX-IRCOM

infiNET EX® Wireless IR/RS-232 Control Module

> *A low-cost wireless control interface*

> *Eliminates the need to run wire or install conduit*

> *Provides one RS-232 and two IR control ports [1]*

> *Communicates via the infiNET EX® wireless network*

> *Compatible with Crestron® 3-Series® control systems [2]*

> *Stores frequently-used IR codes on board for fastest response*

> *Reports data overflow to the control system*

> *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-IRCOM 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 an IR and RS-232 control interface for video displays, AV components, small appliances, and other equipment. Virtually anything that can be controlled with an IR remote or serial interface can be integrated with a Crestron control system using the INET-IOEX-IRCOM. It includes two discrete IR ports and one bidirectional RS-232 port, and communicates with the 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-IRCOM is compatible with 3-Series® control systems only.

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-IRCOM 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-IRCOM 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]

Wired Communications

RS-232: Supports 2-way device control and monitoring up to 115.2k baud with software handshaking (via the control system)
IR: Supports 1-way device control via infrared up to 1.2 MHz (via the control system)

Connectors

S/G 1 – 2: (1) 4-pin 3.5 mm detachable terminal block;
Comprises (2) IR output ports;
IR output up to 1.2 MHz

G/TX/RX: (1) 3-pin 3.5 mm detachable terminal block;
Bidirectional RS-232 port;
Up to 115.2k baud; software handshaking support

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
IR 1 – 2: (2) Green LEDs, indicate data transmission on each corresponding IR port
TX: (1) Green LED, indicates data transmission on the COM port
RX: (1) Green LED, indicates data reception on the COM port
OVL: (1) Red LED, indicates excessive data reception on the COM port
SETUP: (1) Red LED and (1) recessed pushbutton used to link the module to the wireless gateway

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INET-IOEX-IRCOM – 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

1.6 oz (45 g)

MODELS & ACCESSORIES

Available Models

INET-IOEX-IRCOM: infiNET EX® Wireless IR/RS-232 Control Module

Included Accessories

PW-0510WUL: Wall Mount Power Pack, 5VDC, 1.2A, Flying Leads, Universal (Qty. 1 included)
IRP2: IR Emitter w/Terminal Block Connector (Qty. 2 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
CNSP-XX: Custom Serial Interface Cable

Notes:

1. The RS-232 COM port is intended for use with relatively simple devices that send and receive small packets and do not generate a lot of data. 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.
2. The INET-IOEX-IRCOM is compatible with 3-Series control systems only.
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.

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