

DIN Rail 3-Series® Automation Processor w/ infiNET EX®

- > Next generation control system
- > 3-Series® Control Engine — substantially faster and more powerful than other control systems
- > Exclusive modular programming architecture
- > Programmable astronomical time clock for scheduled events
- > Onboard 256MB RAM & 4GB Flash memory
- > Memory card slot
- > Integrated infiNET EX® wireless gateway
- > Industry-standard Ethernet and Cresnet® wired communications
- > XPanel with Smart Graphics™ computer and Web based control
- > iPhone®, iPad®, Android™, and Samsung Smart TV® control app support
- > Crestron Fusion® Enterprise Management Software support
- > SNMP support
- > Native BACnet™/IP support^[3]
- > Installer setup via Crestron Toolbox™ or Internet Explorer®^[4]
- > Backwards compatible to run existing SIMPL programs
- > Full Unicode (multi-language) support
- > Increased network throughput and security
- > Secure access through Active Directory integration or standalone account management
- > Hardware level security using 802.1x authentication
- > IIS v.6.0 Web Server
- > IPv6 ready
- > Front panel USB computer console port
- > 9M wide DIN rail mountable



3-Series® Control Systems

Today's commercial buildings and custom homes comprise more technology than ever before, and all these systems need to be networked, managed, and controlled in fundamentally new ways. The IP based 3-Series platform is engineered from the ground up to deliver a network-grade server appliance capable of faithfully handling everything from lighting and AV system control to total building management.

3-Series embodies a distinctively robust, dynamic, and secure platform to elevate your system designs to higher levels of performance and reliability. Compared to other control systems, Crestron 3-Series provides a pronounced increase in processing power and speed with more memory, rock solid networking and IP control, and a unique modular programming architecture.

The Crestron® DIN-AP3MEX is a 3-Series Control System® designed for DIN rail mounting applications. Built-in infiNET EX® wireless technology makes the DIN-AP3MEX ideal for all types of lighting, shading, AV, and climate control applications wherever a reliable wireless control solution is preferred. Wired Cresnet® and Ethernet communication is also supported. Featuring the 3-Series® control engine, the DIN-AP3MEX forms the core of any modern networked home or commercial building, managing and integrating all the disparate technologies throughout the facility to make life easier, greener, more productive, and more enjoyable.

DIN Rail Mounting

The DIN-AP3MEX is designed to snap onto a standard DIN rail for installation in a wall mount enclosure^[1] (Crestron DIN-EN series^[2] or similar) or on a wall panel. DIN rail mounting affords a very space-efficient, cost-effective, and modular solution for configuring complete automation systems using the DIN-AP3MEX along with additional Crestron and third-party DIN rail mountable devices.

Modular Programming Architecture

Designed for enhanced scalability, the DIN-AP3MEX affords high-speed, real-time multi-tasking to seamlessly run multiple programs simultaneously. This exclusive programming architecture lets programmers independently develop and run device-specific programs for lighting, shades, HVAC, security, AV, etc., allowing for the optimization of each program, and allowing changes to be made to one program without affecting the whole. Even as your system grows, processing resources can easily be shifted from one 3-Series processor to another without rewriting any code. The end benefit is dramatically simplified upgradability with minimal downtime, whether implementing changes on site or remotely via the network.

Robust Ethernet & IP Control

IP technology is the heart of 3-Series, so it should be no surprise that its networking abilities are second to none. High-speed Ethernet connectivity enables integration with IP-controllable devices and allows the DIN-AP3MEX to be part of a larger managed control network. Whether residing on a sensitive corporate LAN, a home network, or accessing the Internet through a cable modem, the DIN-AP3MEX provides secure,

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reliable interconnectivity with IP-enabled touch screens, computers, mobile devices, video displays, media servers, security systems, lighting, HVAC, and other equipment — whether on premises or across the globe.

Control Apps & XPanel

Years ago, Crestron pioneered the world's first IP-based control system unleashing vast new possibilities for controlling, monitoring, and managing integrated systems over a LAN, WAN, and the Internet. Today, Crestron offers more ways than ever to control your world the way you want. Using a computer, smartphone, tablet, or Smart TV, Crestron lets you control anything in your home or workplace from anywhere in the world.

Native to every 3-Series control system, Crestron XPanel technology transforms any laptop or desktop computer into a virtual Crestron touch screen. Crestron control apps deliver the Crestron touch screen experience to iPhone®, iPad®, and Android™ devices, letting you safely monitor and control your entire residence or commercial facility using the one device that goes with you everywhere. Even Samsung Smart TV® has a Crestron control app available.

Crestron Fusion® Enterprise Management



Crestron Fusion provides an integrated platform for creating truly smart buildings that save energy, enhance worker productivity, and prolong the life-span of valuable equipment. As part of a complete managed network in a corporate enterprise, college campus, convention center or any other facility, the DIN-AP3MEX works integrally with Fusion RV® Remote Asset Management Software to enable remote scheduling, monitoring, and control of rooms and technology from a central help desk. Fusion EM® Energy Management Software enables organizations to reduce energy consumption by tracking real-time usage and automating control of lighting, shades, and HVAC.

Astronomical Time Clock Feature

Scheduled events may be programmed on the DIN-AP3MEX according to an astronomical time clock. As a result, events can be set to occur at specific times or at an offset from sunrise or sunset.

SNMP Support

Built-in SNMP support enables integration with third-party IT management software, allowing network administrators to manage and control Crestron systems on the network in an IT-friendly format.

infiNET EX® Wireless Control

Integrated infiNET EX technology provides an extremely easy and cost-effective way to add control of lighting, shades, room temperature, and other functions using our complete line of infiNET EX based wireless products. Perfect for existing structures and rentals, infiNET EX affords ultra-reliable 2-way wireless communications throughout the home without the need for physical control wiring.



Cresnet®

Cresnet provides a dependable network wiring solution for Crestron keypads, lighting controls, thermostats, and other devices that don't require the higher speed of Ethernet or the wireless communication of infiNET EX. The Cresnet bus offers easy wiring and configuration,

carrying bidirectional communication and 24VDC power to each device over a simple 4-conductor cable. To assist with troubleshooting, the DIN-AP3MEX includes our patent-pending Network Analyzer which continuously monitors the integrity of the Cresnet network for wiring faults, marginal performance, and other errors.

The DIN-AP3MEX includes a pair of Cresnet master ports (paralleled) capable of supporting approximately 20 typical devices. Larger systems with more than 20 devices can be handled by adding the DIN-HUB Cresnet Distribution Hub^[2]. Connectivity for multiple homeruns can be facilitated using one or more DIN-BLOCK Cresnet Distribution Blocks^[2]. Additionally, at least one DIN-PWS50 Cresnet Power Supply^[2] is required to power the DIN-AP3MEX and any connected Cresnet devices.

BACnet™

Native support for the BACnet/IP communication protocol provides a direct interface to third-party building management systems over Ethernet, simplifying integration with HVAC, security, fire & life safety, voice & data, lighting, shades, and other systems. Using BACnet/IP, each system runs independently with the ability to communicate together on one platform for a truly smart building.^[3]

SPECIFICATIONS

Control Engine

3-Series®; real-time, preemptive multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs

Memory

DDR3 SDRAM: 256 MB

Flash: 4 GB

Memory Card: supports SD™ and SDHC™ cards up to 32 GB

Wired Communications

Ethernet: 10/100 Mbps; auto-switching; auto-negotiating; auto-discovery; full/half duplex; industry-standard TCP/IP stack; UDP/IP; CIP; DHCP; SSL; IEEE 802.1X; SNMP; BACnet™/IP^[3]; IPv4 or IPv6; Active Directory authentication; IIS v.6.0 Web Server; SMTP e-mail client; installer setup via Crestron Toolbox™ or MSIE^[4]

Cresnet®: Cresnet master mode

USB: Supports computer console via front panel USB 2.0 device port

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^[5]

Device Support: Maximum 100 infiNET EX devices (inclusive of up to 6 MTX-3 and/or MLX-3 remotes) and 5 infiNET EX expanders (model CLW-EXPEX or GLA-EXPEX)

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Connectors & Card Slots

Ground: (1) Captive screw terminal, chassis ground lug

Antenna: (1) Connection for supplied antenna

MEMORY: (1) SD memory card slot;
Accepts one SD or SDHC card up to 32 GB for memory expansion

COMPUTER: (1) USB Type B female;
USB 2.0 computer console port (6 ft cable included);
For setup only

NET: (2) 4-pin 3.5mm detachable terminal blocks, paralleled;
Cresnet master port and 24 Volt DC power input

LAN: (1) 8-wire RJ45 jack;
10Base-T/100Base-TX Ethernet port

Controls & Indicators

PWR: (1) Dual-color green/amber LED, indicates operating power supplied from Cresnet network or power supply, turns amber while booting and green when operating

NET: (1) Amber LED, indicates communication with the Cresnet system

MSG: (1) Red LED, indicates processor has generated an error message

HW-R: (1) Recessed miniature pushbutton for hardware reset

SW-R: (1) Recessed miniature pushbutton for software reset

ACQUIRE: (1) Recessed pushbutton with red LED, used to set up connections with wireless devices

ACTIVITY: (1) Red LED, indicates wireless communications

LAN: (2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity

Power Requirements

Cresnet Power Usage: 8 Watts (0.33 Amp @ 24 Volts DC)

Environmental

Temperature: 32° to 104°F (0° to 40°C)

Humidity: 10% to 90% RH (non-condensing)

Heat Dissipation: 26 BTU/Hr

Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0 rated, 35 mm DIN EN 60715 rail mount, DIN 43880 form factor for enclosures with 45 mm front panel cutout, occupies 9 DIN module spaces (162 mm)

Dimensions

Height: 3.72 in (95 mm)

Width: 6.28 in (160 mm)

Depth: 2.29 in (59 mm)

Weight

9.8 oz (277 g)

MODELS & ACCESSORIES

Available Models

DIN-AP3MEX: DIN Rail 3-Series® Automation Processor w/infiNET EX®

Available Accessories

ANT-EXT: Antenna Extenders

CLW-EXPEX: infiNET EX® Wireless Expander

GLA-EXPEX: Crestron Green Light® Wireless Expander for infiNET EX® Networks

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

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

DIN-EN: Enclosures for DIN Rail Devices

DIN-PWS50: DIN Rail 50 Watt Cresnet Power Supply

DIN-PWS30-277: DIN Rail 30 Watt Cresnet Power Supply, 277V

DIN-BLOCK: DIN Rail Cresnet Distribution Block

DIN-HUB: DIN Rail Cresnet Distribution Hub

DIN-1DIM4: DIN Rail Dimmer, 1 feed, 4 channels

DIN-1DIMU4: DIN Rail Universal Dimmer, 1 feed, 4 channels

DIN-4DIMFLV4: DIN Rail 0-10V Fluorescent Dimmer, 4 feeds, 4 channels

DIN-8SW8: DIN Rail High-Voltage Switch, 8 feeds, 8 channels

DIN-8SW8-I: DIN Rail High-Voltage Switch with Digital Inputs

DIN-2MC2: DIN Rail Motor Control, 2 feeds, 2 channels

DIN-AO8: DIN Rail Analog Output Module

DIN-IO8: DIN Rail Versiport Module

Crestron® App: Control App for Apple® iOS®

Crestron Mobile Pro®: Control App for Apple® iOS® and Android™

XPanel: Crestron Control® for Computers

myCrestron: Dynamic DNS Service

Fusion EM®: Energy Management Software

Fusion RV®: Remote Asset Management Software

RoomView® Express: Remote Help Desk and Resource Management Software

SW-3SERIES-BACNET: BACnet™/IP Support for 3-Series®

CSP-LIR-USB: IR Learner

Notes:

1. Use of an Antenna Extender ([ANT-EXT](#)) is advised when mounting the DIN-AP3MEX in an enclosure.
2. Item(s) sold separately.
3. License required. The DIN-AP3MEX supports a maximum of 500 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.
4. Web-based installer setup requires the Microsoft® Internet Explorer® Web browser running on a Windows® PC.
5. The effective range of the entire wireless network is extended based on the placement and capabilities of each network device. Consult the specifications for each wireless network device to verify wireless capabilities and limitations.

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.

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