

3-Series® Room Media Controller

- > Compact and cost-effective control system
- > 3-Series® Control Engine
- > Modular programming architecture (optional^[1])
- > Onboard 256MB RAM & 4GB Flash memory
- > Support for external USB flash memory and mass storage devices
- > Industry-standard Ethernet and Cresnet® wired communications
- > XPanel with Smart Graphics™ computer and web based control
- > iPhone®, iPad®, and Android™ control app support
- > Crestron Fusion® Cloud Enterprise Management Service support
- > SNMP remote management support
- > One RS-232/422/485 COM port with hardware and software handshaking
- > Two IR/serial, two relay, and two digital input ports
- > Programmable event scheduling with astronomical time clock
- > Native BACnet™/IP support^[3]
- > Installer setup via Crestron Toolbox™ software or web browser
- > C#, symbol based, and drag-and-drop programming environments
- > Full Unicode (multi-language) support
- > Increased network throughput and security
- > Secure access through full user/group management or Active Directory integration
- > Hardware level security using 802.1X authentication
- > TLS, SSL, SSH, and SFTP network security protocols
- > FIPS 140-2 compliant encryption
- > Built-in web server
- > IPv6 ready
- > USB On-The-Go port
- > PoE network powered
- > Compact, stackable "IFE micro" form factor
- > Surface or DIN rail mountable
- > Available rack mount and pole mount options^[4]

The Crestron® RMC3 is a compact and cost-effective 3-Series Control System® designed to provide control and monitoring for a single display device, a small AV system, lighting and shading, climate control, security, energy management, and many other specialized applications. Its tiny form factor allows it to be placed just about anywhere with the option to attach it to a flat surface or DIN rail using the mounting bracket provided. It can fit easily behind a video display or above a projector, and provides enough control ports to control the display device along with a screen or lift. Cresnet® and Ethernet connectivity provides full support for the full line of Crestron touch screens, keypads, dimmers, shades, thermostats, and other peripherals. Featuring the 3-Series® control engine, the RMC3 provides a robust, feature-packed controller that's ideal for mass deployment across college campuses, corporate office buildings, museums, MDUs, hotels, and convention centers.



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.

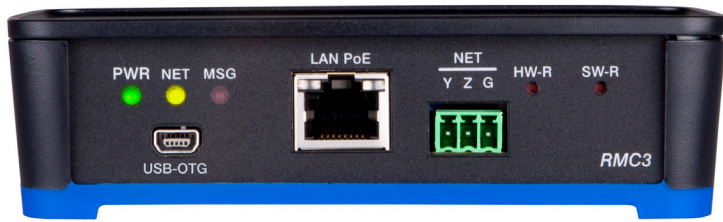
Modular Programming Architecture (Optional^[1])

This optional add-on enables high-speed, real-time multitasking to allow the RMC3 to run multiple programs simultaneously. With this add-on, programmers can develop and run independent, 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.^[1]

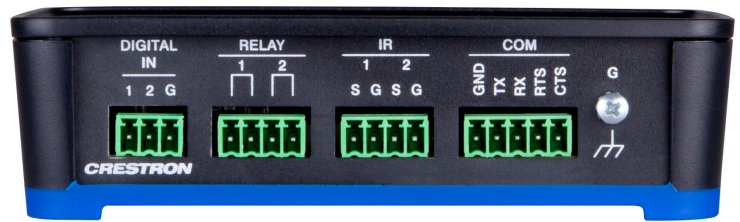
Robust Ethernet & IP Control

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 RMC3 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 RMC3 provides secure, 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.

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Front View



Rear View

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, or tablet device, 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.

Crestron Fusion® Cloud

Crestron Fusion Cloud 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 RMC3 works integrally with Crestron Fusion Cloud to enable remote scheduling, monitoring, and control of rooms and technology from a central help desk. It also enables organizations to reduce energy consumption by tracking real-time usage and automating control of lighting, shades, and HVAC.



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.

Cresnet®

Cresnet provides a dependable network wiring solution for Crestron keypads, lighting controls, shade motors, thermostats, occupancy sensors, and other devices that don't require the higher speed of Ethernet. The Cresnet bus offers easy wiring and configuration, carrying bidirectional communication and 24VDC power to each device over a simple 4-conductor cable.^[2] To assist with troubleshooting, the RMC3 includes our patent-pending Network Analyzer which continuously monitors the integrity of the Cresnet network for wiring faults, marginal performance, and other errors.

Onboard Control Ports

In addition to Ethernet, the RMC3 includes a variety of control ports for interfacing with third-party equipment. A single bidirectional COM port (RS-232/422/485) and two IR ports allow for interfacing with AV devices,

small appliances, and other equipment. Two programmable relay ports are provided for controlling projection screens, lifts, power controllers, and other contact-closure actuated equipment. Two digital input ports enable the integration of power sensors, motion detectors, door switches, alarms, anything else that provides a dry contact closure or low-voltage logic signal.

BACnet™/IP

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]



Power over Ethernet

Using PoE technology, the RMC3 gets its operating power right through the LAN wiring. PoE (Power over Ethernet) eliminates the need for a local power supply or any dedicated power wiring. A PoE Injector (PWE-4803RU^[4]) simply connects in line with the LAN cable at any convenient location. Crestron PoE switches (CEN-SW-POE-5 or CEN-SW-POE-16^[4]) may also be used to provide a total networking solution with built-in PoE.

Integrator Friendly Enclosure

The RMC3 features the Crestron IFE form factor, a compact "Integrator Friendly Enclosure" design that fits almost anywhere and enables a variety of installation options. Its shape allows multiple RMC3s and other IFE compliant devices to be stacked together. Using the included mounting bracket, it can be fastened to any flat surface or snapped onto a standard DIN rail. Rack mount and pole mount kits are also available.^[4]



Shown with mounting bracket

RMC3 3-Series[®] Room Media Controller

SPECIFICATIONS

Control Engine

Crestron 3-Series; real-time, preemptive multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs (license required⁽¹⁾)

Memory

DDR3 SDRAM: 256 MB

Flash: 4 GB

External Storage: supports USB mass storage devices

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE 802.1X, SNMP, BACnet/IP⁽³⁾, IPv4 or IPv6, Active Directory authentication, web server, SMTP e-mail client, IEEE 802.3af and 802.3at Type 1 compliant

Cresnet: Cresnet master mode

USB: Supports computer console and USB mass storage devices via USB OTG (On-The-Go) port

RS-232/422/485: For 2-way device control and monitoring, supports RS-232, RS-422, or RS-485 up to 115.2k baud with hardware and software handshaking

IR/Serial: Supports 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

Connectors

DIGITAL IN 1 – 2: (1) 3-pin 3.5 mm detachable terminal block; Comprises (2) digital inputs (referenced to GND);

Input Voltage Range: 0-24 Volts DC;

Logic Threshold: ≥ 2.0 Volts DC 0/low, ≤ 1.1 Volt DC 1/high;

Input Impedance: 2.2k Ohms pulled up to 5 Volts

RELAY 1 – 2: (1) 4-pin 3.5 mm detachable terminal block;

Comprises (2) normally open, isolated relays;

Rated 1 Amp, 30 Volts AC/DC;

MOV arc suppression across contacts

IR 1 – 2: (1) 4-pin 3.5 mm detachable terminal block;

Comprises (2) IR/Serial output ports;

IR output up to 1.2 MHz;

1-way serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

COM: (1) 5-pin 3.5 mm detachable terminal block;

Bidirectional RS-232/422/485 port;

Up to 115.2k baud; hardware and software handshaking support

G: (1) 4-40 screw;

Chassis ground lug

USB-OTG: (1) USB Type Mini-AB female;

USB OTG port for computer console and USB mass storage devices;

(6 ft A male to Mini-B male cable, and A female to Mini-A male adapter, included)

LAN PoE: (1) 8-pin RJ45 female;

10Base-T/100Base-TX Ethernet port, Power over Ethernet compliant

NET: (1) 3-pin 3.5 mm detachable terminal block;

Cresnet master port (data only, no power⁽²⁾)

Controls & Indicators

PWR: (1) Dual-color green/amber LED, indicates operating power supplied via PoE, 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

LAN PoE: (2) LEDs, green LED indicates 100Mbps Ethernet link status, amber LED indicates Ethernet activity

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

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

Power

Power over Ethernet: IEEE 802.3at Type 1 (802.3af compatible) Class 0 (12.95 W) PoE Powered Device

NOTE: Does not use or supply any Cresnet power

Environmental

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

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

Heat Dissipation: 17 BTU/hr

Construction

Enclosure: IFE micro form factor, black and blue plastic

Mounting: Freestanding, stackable, surface mount, or 35 mm DIN EN 60715 rail mount; occupies 8 DIN module spaces (144 mm); surface/DIN rail mounting bracket included, optional rack mount and pole mount kits sold separately

Dimensions

Height: 1.35 in (35 mm), 1.77 in (45 mm) with bracket

Width: 5.04 in (128 mm), 5.36 in (137 mm) with bracket

Depth: 2.86 in (73 mm)

Weight

6.4 oz (180 g)

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MODELS & ACCESSORIES

Available Models

RMC3: 3-Series® Room Media Controller Available April 1, 2014

Available Accessories

SW-RMC3-10PROG: 10 Program MPA Support License

RMK-IFE-1U: IFE Rack Mount Kit

PLMK-IFE-101: IFE Pole Mount Kit

PWE-4803RU: PoE Injector

CEN-SW-POE-5: 5-Port PoE Switch

CEN-SWPOE-16: 16-Port Managed PoE Switch

CNSP-XX: Custom Serial Interface Cable

IRP2: IR Emitter Probe w/Terminal Block Connector

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

XPanel: Crestron Control® for Computers

myCrestron: Dynamic DNS Service

Crestron Fusion®: Enterprise Management Platform

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

CSP-LIR-USB: IR Learner

Notes:

1. To enable Modular Programming Architecture (MPA) on the RMC3 requires the purchase of one SW-RMC3-10PROG license. The license enables support for running up to 10 simultaneous programs on a single RMC3. The license is not required if running only one program on the RMC3.
2. The NET (Cresnet) port on the RMC3 is a 3-pin connector which provides connectivity for Cresnet data only, not power. The Cresnet power conductor does not terminate to the RMC. An external Cresnet power supply is required to provide power for Cresnet devices.
3. License required. The RMC3 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. 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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