3-Series® Room Media Controller

- *Compact 3-Series® control system with 256 MB RAM and 4 GB Flash memory*
- *Embedded 3-Series CPU processor*
- *Modular programming architecture (optional)*
- *iPhone®, iPad®, and Android™ device control app support*
- *XPanel computer and web-based control*
- *Onboard IR/serial, COM, digital input, relay, Cresnet® network, and Ethernet control ports*
- *USB On-the-Go (OTG) port*
- *Built-in .AV Framework™ software*
- *Crestron Fusion® software room monitoring and scheduling*
- *XiO Cloud® service provisioning and management*
- *SNMP remote management support*
- *Native BACnet network/IP support*
- *Installer setup via Crestron Toolbox™ software, web browser, or cloud*
- *IPv6 ready*
- *PoE (Power over Ethernet) network powered*
- *Compact, stackable IFE micro form factor*
- *Surface or DIN rail mountable*
- *Available rack mount and pole mount options*

The Crestron® RMC3 provides a secure, high-performance, cost-effective control processor and interface for controlling and monitoring a single display device, a small AV system, lighting and shading, climate control, security, energy management, and many other specialized applications. A small form factor allows the RMC3 to be placed just about anywhere, with the option to attach it to a flat surface or DIN rail using the included mounting bracket. The RMC3 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.

3-Series Control Engine

The RMC3 features an integrated, enterprise-grade 3-Series® control processor. Crestron 3-Series control engines deliver a dynamic and secure control system platform capable of managing a room of disparate technologies. Reliable networking and IP control afford seamless integration with other systems and devices, with add-on control capability using Crestron touch screens, wireless remotes, and mobile device apps, as well as remote management through Crestron Fusion® software and the XiO Cloud® service.

Modular Programming Architecture

The RMC3 is designed to run a single program out of the box. The optional SW-RMC3-10PROG modular programming architecture (MPA) add-on allows the RMC3 to run up to ten programs simultaneously.[1] Programmers can develop and run independent, device-specific programs, enabling each program to be optimized for a specific function and allowing for changes to be made to one program without affecting the whole system.

Control Apps and XPanel

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, to safely monitor and control a residence or commercial facility using the one device that goes with you everywhere.

Onboard Control Ports

Through a full complement of onboard control ports, the RMC3 can be integrated with a wide variety of audio, video, lighting, motorized shades, thermostats, door locks, sensors, security systems, and other equipment.

- Ethernet provides an interface for connecting to the building network and controlling Crestron AV switchers, audio processors, power controllers, and other IP controllable equipment.
- Cresnet® network connectivity provides support for Crestron lighting dimmers, motorized shades, sensors, thermostats, keypads, and more.[2]
- Onboard RS-232, IR, relay, and digital input control ports enable direct integration with all types of third-party equipment.

Expanded connectivity can be provided to the RMC3 via Crestron control port expansion modules, Ethernet to Cresnet bridges, wired Ethernet I/O extenders, or Wi-Fi® network I/O extenders (all sold separately).

Built-In .AV Framework Software

The RMC3 provides native support for .AV Framework™ software, which is a web-based management solution that is used to deploy scalable Crestron enterprise room solutions without requiring any programming. Built-in .AV Framework technology delivers a fully functional AV presentation system

with simplified web-based configuration and a choice of control options and add-ons. For more information, visit www.crestron.com/avframework.

Crestron Fusion Room Monitoring and Scheduling

Crestron Fusion provides an integrated platform for creating smart buildings that save energy and enhance worker productivity. As part of a complete managed network in a corporate enterprise, college campus, convention center, or any other facility, the RMC3 works with Crestron Fusion to enable remote scheduling, monitoring, and control of rooms and technology from a central help desk or mobile app. It also enables organizations to reduce energy consumption by tracking real-time usage and automating control of AV, lighting, shades, and HVAC. For more information, visit www.crestron.com/fusion.

XiO Cloud Provisioning and Management

3-Series control systems leverage the power and flexibility of XiO Cloud services, enabling users to remotely provision, monitor, and manage supported Crestron and third-party devices across an enterprise network. XiO Cloud can be used to configure and load programs to the control system before it is received, making the control system fully functional as soon as it is connected to the network. XiO Cloud is built on the Microsoft® Azure® software platform and utilizes Microsoft's industry leading Azure IoT Hub technology. XiO Cloud enables installers and IT managers to deploy and manage thousands of devices simultaneously. Unlike other virtual machine based cloud solutions, Azure services provide unlimited scalability to suit the ever growing needs of an enterprise. For more information, visit www.crestron.com/xiocloud.

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.

BACnet Support

Native support for the BACnet communication protocol provides a direct interface to third-party building management systems over Ethernet, simplifying integration with HVAC, security, and other systems. Using BACnet, each system runs independently but communicates together on one platform.[3]

Power over Ethernet

Using Power over Ethernet (PoE) technology, the RMC3 gets its operating power directly through the LAN wiring, eliminating the need for a local power supply or any dedicated power wiring. A PoE Injector (PWE-4803RU) simply connects in line with the LAN cable at any convenient location. Crestron PoE switches may also be used to provide a total networking solution with built-in PoE. All PoE injectors and switches are sold separately.

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 RMC3 and other IFE compliant devices to be stacked together. Using the included mounting bracket, it can be fastened to a flat surface or snapped onto a standard DIN rail. Rack mount and pole mount kits are also available (sold separately).

Specifications

Control Engine

Crestron® 3-Series® control engine; real-time, preemptive multithreaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs (license required [1]), preloaded .AV Framework™ base program

Memory

DDR3 SDRAM	256 MB
Flash	4 GB
External Storage	Supports USB mass storage devices

Communications

Ethernet	100 Mbps, autoswitching, autonegotiating, autodiscovery, full/half duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SSH File Transfer Protocol (SFTP), FIPS 140-2 compliant encryption, IEEE 802.1X, SNMP, BACnet network / IP [3], IPv4 or IPv6, Active Directory® service authentication, web server, XiO Cloud® client, SMTP email client, IEEE 802.3af and 802.3at Type 1 compliant
Cresnet® Network	Cresnet® server mode
USB	Supports computer console and USB mass storage devices via USB On-The-Go (OTG) 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 (0–5V) up to 115.2k baud

3-Series® Room Media Controller

Connectors

DIGITAL IN 1–2
(1) 3-pin 3.5 mm detachable terminal block;
Comprises (2) digital inputs (referenced to GND);
Input Voltage Range: 0–24VDC;
Logic Threshold: ≥ 2.0VDC 1/High, ≤1.1VDC 0/Low;
Input Impedance: 2.2k Ω pulled up to 5V

RELAY 1–2
(1) 4-pin 3.5 mm detachable terminal block;
Comprises (2) normally open, isolated relays;
Rated 1A, 30VAC/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 (0–5V) 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 (1.83 m) A male to Mini-B male cable, and A female to Mini-A male adapter, included

LAN PoE
(1) 8-pin RJ-45 female;
100BASE-TX Ethernet port, Power over Ethernet compliant

NET
(1) 3-pin 3.5 mm detachable terminal block;
Cresnet server port (data only, no power[2])

Controls and 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 a logging message

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

HW-R
(1) Recessed miniature push button for hardware reset

SW-R
(1) Recessed miniature push button 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 (noncondensing)
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
1.36 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)

Compliance

Regulatory Model: RMC3
CE, IC, FCC Part 15 Class B digital device

To search for product certificates, refer to support.crestron.com/app/certificates.

Model

RMC3
3-Series® Room Media Controller

CRESTRON®

3-Series® Room Media Controller

Available Accessories

For a list of available accessories, visit the RMC3 product page.

Notes:

1. Enabling 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 only one program is run on the RMC3. To obtain a license for the RMC3, complete the Request for SW-RMC3-10PROG License form. For questions, contact license@crestron.com.

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 RMC3. An external Cresnet power supply is required to provide power for Cresnet devices.

3. A BACnet and IP license is required. A free license is available to support up to 50 BACnet objects on a single 3-Series control system. Enabling support for more than 50 BACnet objects requires the purchase of one SW-3SERIES-BACNET-50+ license. 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. To obtain the license, visit www.crestron.com/bacnetlicense.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or contact us for additional information by visiting www.crestron.com/contact/our-locations for your local contact.

The original language version of this document is U.S. English. All other languages are a translation of the original document.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed online at www.crestron.com/legal/patents.

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

Rev 06/21/23

3-Series® Room Media Controller

5.04 in.
(128 mm)

2.86 in.
(73 mm)

1.36 in.
(35 mm)

PWR NET MSG   LAN PoE   NET   HW-R   SW-R
                                  Y Z G

USB-OTG   RMC3

DIGITAL   RELAY   IR   COM
  IN   1   2   1   2
1 2 G   S G S G   GND TX RX RTS CTS   G

CRESTRON