

3-Series Control System®

- > Next generation control system
- > 3-Series™ Control Engine — substantially faster and more powerful than other control systems
- > Exclusive modular programming architecture
- > Onboard 512MB RAM & 4GB Flash memory
- > Expandable storage up to 1TB
- > Rear panel memory card slot
- > High-speed USB 2.0 host port
- > 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
- > One RS-232/422/485 COM port with hardware and software handshaking
- > Two RS-232 COM ports with software handshaking only
- > 8 IR/serial, 8 relay, and 8 Versiport I/O ports
- > Native BACnet®/IP support⁽¹⁾
- > Installer setup via Crestron Toolbox™ or Internet Explorer®⁽²⁾
- > 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
- > JITC certified model available for use in secure network environments
- > IIS v.6.0 Web Server
- > IPv6 ready
- > Front panel USB computer console port
- > 1-space rack-mountable



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

Designed for enhanced scalability, the CP3 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 AV, lighting, HVAC, security, 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 CP3 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 CP3 provides secure, reliable interconnectivity with IP-enabled touch screens, computers, mobile devices, video displays, Blu-ray Disc® players, 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.

The Crestron® CP3 presents a new benchmark in control system technology. Featuring the 3-Series™ control engine, the CP3 forms the core of any modern networked home or commercial building, managing and integrating all the disparate technologies throughout your facility to make life easier, greener, more productive, and more enjoyable.

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 boardroom AV and home theater 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

CP3 3-Series Control System®



CP3 – Rear View

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 CP3 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.

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, thermostats, 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. To assist with troubleshooting, the CP3 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 CP3 includes three bidirectional COM ports and eight IR ports to interface directly with all of your centralized AV sources, video displays, and other devices. Eight programmable relay ports are included for controlling window shades, projection screens, lifts, power controllers, and other contact-closure actuated equipment. Eight "Versiport" I/O ports enable the integration of occupancy sensors, power sensors, door switches, or anything else that provides a dry contact closure, low-voltage logic, or 0-10 Volt DC 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.^[1]

Government Version

Crestron is committed to developing solutions for critical secure network environments. A government version of the CP3, model CP3-GV, is available preconfigured for deployment on a multi-level secured network. It has been specially developed and tested with specific government firmware. The CP3-GV has been assessed by JITC using IA requirements from the Department of Defense, and the results have been documented in a DIACAP scorecard. For additional information, see Crestron True Blue Online Help Answer ID 5361.

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

SDRAM: 512 MB

Flash: 4 GB

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

External Storage: support USB mass storage devices up to 1 TB

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^[1]; IPv4 or IPv6; Active Directory authentication; IIS v.6.0 Web Server; SMTP e-mail client; installer setup via Crestron Toolbox™ or MSIE^[2]

Cresnet®: Cresnet master mode

USB: Supports USB HID and USB mass storage class devices via rear panel USB 2.0 host ports, supports computer console via front panel USB 2.0 device port

RS-232/422/485: For 2-way device control and monitoring, all ports support RS-232 up to 115.2k baud with software handshaking, one port also supports RS-422 or RS-485 and hardware 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 & Card Slots

RELAY OUTPUT 1 – 8: (2) 8-pin 3.5mm detachable terminal block comprising (8) normally open, isolated relays; Rated 1 Amp, 30 Volts AC/DC; MOV arc suppression across contacts

CP3 3-Series Control System®

I/O 1 – 8: (1) 9-pin 3.5mm detachable terminal block comprising (8) “Versiport” digital input/output or analog input ports (referenced to GND);

Digital Input: Rated for 0-24 Volts DC, input impedance 20k Ohms, logic threshold >3.125V low/0 and <1.875V high/1;

Digital Output: 250mA sink from maximum 24 Volts DC, catch diodes for use with “real world” loads;

Analog Input: Rated for 0-10 Volts DC, protected to 24 Volts DC maximum, input impedance 21k ohms with pull-up resistor disabled;

Programmable 5 Volts, 2k ohms pull-up resistor per pin

IR - SERIAL OUTPUT 1 – 8: (2) 8-pin 3.5mm detachable terminal block comprising (8) 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: (1) 5-pin 3.5mm detachable terminal block;

Bidirectional RS-232/422/485 port;

Up to 115.2k baud; hardware and software handshaking support

COM 2 – 3: (2) 3-pin 3.5mm detachable terminal blocks;

Bidirectional RS-232 ports;

Up to 115.2k baud; software handshaking support

MEMORY: (1) SD memory card slot;

Accepts one SD or SDHC card up to 32 GB for memory expansion

USB: (1) USB Type A female;

USB 2.0 port for storage devices

LAN: (1) 8-wire RJ45 jack;

10Base-T/100Base-TX Ethernet port

NET: (1) 4-pin 3.5mm detachable terminal block, Cresnet master port;

Outputs power to Cresnet devices if a power pack is connected to the 24VDC power input jack;

Receives Cresnet network power if no power pack is connected to the 24VDC power input jack;

See “Power Requirements” for additional specifications

24VDC 2.0A: (1) 2.1 x 5.5 mm DC power connector;

24 Volt DC power input, PW-2420RU power pack included;

Passes through to NET port to power Cresnet devices;

See “Power Requirements” for additional specifications

G: (1) 6-32 screw, chassis ground lug

COMPUTER (front): (1) USB Type B female;

USB 2.0 computer console port (6 ft cable included);

For setup only

Controls & Indicators

PWR: (1) Green LED, indicates operating power supplied from power pack or Cresnet network

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

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

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

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

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

Power Requirements

Power Pack: 2.0 Amps @ 24 Volts DC;

100-240 Volts AC, 50/60 Hz power pack, model PW-2420RU included

Available Cresnet Power: 24 Watts (1 Amp @ 24 Volts DC) when using power pack

Cresnet Power Usage: 15 Watts (0.625 Amp @ 24 Volts DC) when using Cresnet network power

Environmental

Temperature: 41° to 113°F (5° to 45°C)

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

Heat Dissipation: 50 BTU/Hr

Enclosure

Chassis: Metal, black finish

Faceplate: Extruded metal, black finish, polycarbonate label overlay

Mounting: Freestanding or 1U 19-inch rack-mountable (adhesive feet and rack ears included)

Dimensions

Height: 1.70 in (44 mm) without feet

Width: 17.28 in (439 mm), 19.00 in (483 mm) with rack ears

Depth: 6.56 in (167 mm)

Weight

3.12 lb (1.42 kg)

MODELS & ACCESSORIES

Available Models

CP3: 3-Series Control System®

CP3-GV: 3-Series Control System® - Government Version

Included Accessories

PW-2420RU: Power Pack, Desktop, 24VDC, 2A (50 Watts), Regulated, US/International (Qty. 1 included)

Available Accessories

C2N-HBLOCK: Multi-type Cresnet Distribution Block

CNTBLOCK: Cresnet Distribution Block

CNSP-XX: Custom Serial Interface Cable

IRP2: IR Emitter Probe w/Terminal Block Connector

CRESTRON-APP: Crestron® App; refer to the iTunes® App Store for pricing and download

CRESTRON-APP-PAD: Crestron® for iPad® App; refer to the iTunes® App Store for pricing and download

CP3 3-Series Control System®

CRESTRON-MOBILE-PRO: Crestron Mobile Pro® Control App for iPhone®, iPod touch®, and Android™; refer to the iTunes® App Store and Google Play™ for pricing and download

CRESTRON-MOBILE-PRO-G: Crestron Mobile Pro® G Control App for iPad®; refer to the iTunes® App Store for pricing and download

CRESTRON-MOBILE: Crestron Mobile® Control App for iPhone®, iPod touch®, and Android™; refer to the iTunes® App Store and Google Play™ for free download

CRESTRON-MOBILE-G: Crestron Mobile® G Control App for iPad®; refer to the iTunes® App Store for free download

XPANEL: Crestron Control® for Computers

SW-MYCRESTRON: myCrestron Dynamic DNS Service

SW-FUSION-EM: Fusion EM™ Energy Management Software

SW-FUSION-RV: Fusion RV® Remote Asset Management Software

SW-ROOMVW-ENT: RoomView® Express - Remote Help Desk and Resource Management Software, Full License

SW-3SERIES-BACNET-50+: BACnet®/IP Support for 3-Series™ - Full license for more than 50 objects

CSP-LIR-USB: IR Learner

Notes:

1. License required. The CP3 supports a maximum of 1000 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.
2. Web-based installer setup requires the Microsoft® Internet Explorer® Web browser running on a Windows® PC.

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.

Crestron, the Crestron logo, 3-Series, 3-Series Control System, Cresnet, Crestron Control, Crestron Fusion, Crestron Mobile Pro, Crestron Toolbox, Fusion EM, Fusion RV, RoomView, and Smart Graphics are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. BACnet and the BACnet logo are either trademarks or registered trademarks of American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. in the United States and/or other countries. Apple, iPad, and iPhone are either trademarks or registered trademarks of Apple Inc. in the United States and/or other countries. Blu-ray Disc is either a trademark or registered trademark of the Blu-ray Disc Association in the United States and/or other countries. IOS is either a trademark or registered trademark of Cisco Technology, Inc. in the United States and/or other countries. Android is either a trademark or registered trademark of Google, Inc. in the United States and/or other countries. Microsoft, Internet Explorer, and Windows are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Samsung Smart TV is either a trademark or registered trademark of Samsung Electronics Co., Ltd. in the United States and/or other countries. SD and SDHC are either trademarks or registered trademarks of SD-3C, LLC in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice. ©2013 Crestron Electronics, Inc.

CP3 3-Series Control System[®]

