SECTION 25 50 00

INTEGRATED AUTOMATION FACILITY CONTROLS

Equipment Specified in this section:

Control Processor: Crestron MPC-M5

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INTEGRATED AUTOMATION FACILITY CONTROLS

Specifier: The Specifier/Design Professional is responsible for the accuracy of all project specifications, including system application and coordination with related sections. This guide specification is provided as a convenience and requires editing to match actual project requirements. CRESTRON ELECTRONICS, INC. SHALL NOT BE LIABLE FOR ANY DAMAGES ARISING OUT OF THE USE OF ANY OF ITS GUIDE SPECIFICATIONS. For Crestron design assistance and design review please contact Sales Support Services Department at 800.237.2041 or techsales@crestron.com.

1. GENERAL
	1. SECTION INCLUDES
		1. Control Processor
			1. Wall mounted control processor with 10 programmable buttons, customizable backlit labeling, LED feedback, and control ports for controlling external devices.
2. PRODUCTS
	1. CONTROL PROCESSOR
		1. Manufacturers
			1. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide products of **Crestron Electronics, Inc., Rockleigh, NJ 07647**, Phone (800)237-2041, Fax: (201)767‑1903, [www.crestron.com](http://www.crestron.com) **[**or comparable products from a single manufacturer approved by Architect prior to bidding**]**, with the following components and characteristics.
		2. Basis of Design Product:
			1. Crestron MPC-M5.
		3. Minimum Characteristics:
			1. Utilize a real time, event driven, multi-tasking, multi-threaded operating system. Processor shall communicate directly with Ethernet, and control ports.
			2. Control System shall support:
				1. 10/100 BaseT Ethernet
				2. TCP/IP Communications
				3. SMTP Email Client
				4. SNMP Support
				5. Built-In Web Server
				6. SSL security
				7. IPv4
				8. Support user assigned or dynamic IP address.
		4. External Ports

The control system shall be equipped with the following external connection ports:

* + - 1. Infrared Output
				1. Two captive screw terminals, IR/Serial output port;

IR output up to 1.2 MHz; One-way serial TTL/RS-232 (0-5 Volts) 2 up to 115.2k baud .

* + - 1. Digital Input
				1. Four captive screw terminals;

Comprised of 2 programmable digital inputs.

Rated for 0-24 Volts DC, referenced to GND.

Input Impedance: 2.2k ohms with pull-up resistor.

Logic Threshold: 2greater than or equal to 3 volt DC active/high, less than or equal to 1.8 volts DC inactive /low.

* + - 1. Relay
				1. Four captive screw terminals;

Comprised of 2 normally open, isolated relays.

Rated 1 Amp, 30 Volts AC/DC.

MOV arc suppression across contacts.

* + - 1. Serial Communication Port
				1. Three captive screw terminals;

One bidirectional RS-232 port.

Up to 115.2k baud, software handshaking support for communication with serial devices.

* + - 1. Ethernet
				1. One 8-wire RJ45.

10/100 BaseT Ethernet port.

IEEE 802.3af PoE compliant

LED status and activity indicators.

* + 1. User Interface
			1. 10 custom programmable pushbuttons with backlit labeling.
			2. 10 programmable red LEDs.
		2. Mounting
			1. 2-gang standard electrical box.
	1. SYSTEM FUNCTIONS AND SEQUENCES
		1. Audio-Video Control Functions

Specifier:

Retain the following article if Division 26 Lighting System integration is required in the project.

All Room/area sensor feedback (occupancy, daylight, etc.) provided by the lighting system control processors via the Crestron Remote System Definition (.rsd) file.

* + - 1. Room occupancy status shall be based on sensor data provided by Lighting system as specified in Section 26 09 43.13

Specifier: AV control system programming functionality is project specific, add required functionality here.

* + - 1. Room modes: TBD
			2. System control functions: TBD
		1. Lighting and Shade Control Functions

Specifier:

Retain the following articles if Division 26 Lighting System integration is required in the project.

All lighting and shade systems are to be controlled by the lighting system(s) specified in Section 26 09 43.13. This system (AV Control system) will have complete control of the lighting and shades system via the Remote System Definition (.rsd) file provided by the lighting system contractor/installer. Coordination with lighting system contractor is required in order to integrate required functionality into the .rsd intersystem communication file.

* + - 1. Access to full control capability of integrated lighting and shade systems shall be provided by: Custom Software Control Interface as specified in Section 26 09 43.13.
			2. Basic System Control Functions - Lighting system functions as defined by Section 26 09 43.13 shall be accessible by the AV Automation Control Processor. All stored information shall be maintained by the lighting system control processors and only accessed and edited by the AV Automation Control Processors.
			3. Advanced System Control Functions – Lighting system functions as defined by Section 26 09 43.13 shall be accessible by the AV Automation Control Processor. All stored information shall be maintained by the lighting system control processors and only accessed and edited by the AV Automation Control Processors.

END OF SECTION 25 50 00