DIN-AP2

DIN Rail 2-Series Automation Processor

- 2-Series control engine
- MMC memory expansion card slot
- Cresnet port - master/slave selectable
- 10/100 Ethernet | SSL encryption
- e-Control 2, SNMP, & RoomView support
- 2 bidirectional RS-232 COM ports
- 4 IR/serial ports
- 8 Versiport I/O ports
- 4 Low-voltage relay ports
- Configurable via Crestron D3 Pro software
- 9M wide DIN rail mounting
- Requires external power supply
- EMerge Alliance® Compatible

The DIN-AP2 is a 2-Series control processor designed for small to medium sized lighting and automation applications. DIN rail mounting enables modular installation alongside Crestron DIN Rail lighting and automation control modules and other third-party DIN rail mountable devices.

2-Series Processor

Built upon Crestron's reliable 2-Series control engine, the DIN-AP2 is extensively programmable using Crestron's suite of powerful development software and vast database of drivers and software modules. The DIN-AP2 works seamlessly with Crestron's entire line of lighting dimmers and shade controls, keypads and touchpanels, thermostats, wireless gateways, and expansion modules.

DIN Rail Installation

The DIN-AP2 is designed to snap onto a standard DIN rail for installation in a wall mount enclosure or mounted on a wall panel. Wiring connections are made using detachable screw terminals positioned along the top and bottom, clearly accessible from the front for easy installation and servicing. All setup controls and connections are positioned on the center front panel. When installed in an enclosure utilizing 45 mm cutouts, the DIN-AP2's front panel stays accessible while all other connections are concealed.

System Integration

The DIN-AP2 provides for the integration of non-Crestron devices and subsystems through a host of control interfaces. Four isolated relays and eight Versiport I/O ports are built in to accommodate all kinds of sensors, contactors, door strikes, and other low-voltage controls. Two bidirectional RS-232 COM ports and four IR/serial ports allow for the integration of everything from simple shade controllers to advanced security systems. Additional interfaces and controllers can be added easily using Crestron's DIN Rail series lighting and automation modules.

Cresnet®

Cresnet is the communications backbone for Crestron lighting modules, wall box dimmers, shade controllers, thermostats, keypads, touchpanels, and many other devices. This flexible 4-wire bus streamlines the wiring of a complete Crestron system. The DIN-AP2 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. Connectivity for multiple homeruns can be facilitated using one or more DIN-BLOCK Cresnet Distribution Blocks. Additionally, at least one DIN-PWS50 Cresnet Power Supply is required to power the DIN-AP2 and any connected Cresnet devices.

Ethernet and e-Control®2

Built-in 10/100 Ethernet facilitates secure high-speed network connectivity, enabling extensive capabilities for remote system maintenance and control, and providing an interface to other Crestron control systems. Native features include a built-in email client to report system troubles and other functions to the owner or service company via instant email notification. An onboard Web server provides the foundation for Crestron's exclusive e-Control 2 Xpanel technology, providing secure IP-based remote control.

RoomView® and SNMP—For large facilities utilizing multiple DIN-AP2's and other control systems, Crestron's exclusive RoomView Help Desk software delivers a comprehensive solution for remote monitoring and asset management. Also, built-in SNMP support enables similar capability using third-party network management software, allowing full control and monitoring from the IT Help Desk or NOC in a format that's familiar to IT personnel.

Memory Expansion

A memory card slot allows for easy expansion of the DIN-AP2's internal memory using an MMC-compatible memory card up to 2 GB.

D3 Pro™ Software

Crestron D3 Pro software eliminates the need for custom programming, providing a complete design, development, and documentation solution for the lighting professional.

Emerge Alliance Registered

This device is EMerge Alliance® registered and designed to work within a 24VDC room-level power distribution system. The EMerge Alliance is a non-for-profit open industry association leading the rapid adoption of safe DC power distribution in commercial buildings through the development of Emerge Alliance standards[1]. Crestron is a proud member and supporter of the Alliance. For more information about Crestron Solutions for EMerge Alliance Applications visit: www.crestron.com/emerge.

EMerge™ ALLIANCE REGISTERED

DIN-AP2 DIN Rail 2-Series Automation Processor

SPECIFICATIONS

Processor

CPU: 32-bit Freescale ColdFire® Microprocessor

Memory

SDRAM: 32 MB
NVRAM: 256 KB
Flash: 8 MB
Memory Card: expandable up to 2 GB using MMC compatible card (not included)

Operating System

Real-time, preemptive multi-threaded/multitasking kernel; FAT32 file system with long names; supports SIMPL™ Windows® and SIMPL+®

Ethernet

10/100BaseT, auto-negotiating, full/half duplex, static IP or DHCP/DNS, SSL, TCP/IP, UDP/IP, CIP, SMTP, SNMP, built-in Web server and e-mail client; supports Crestron e-Control®2 XPanel and RoomView™ applications

Connectors

I/O 1 – 8: (1) 9-pin 3.5mm detachable terminal block comprising (8) digital input/output or analog input ports (referenced to GND);
Digital Input: Rated for 0-24 Volts DC, input impedance 20k ohms, logic threshold 1.25 Volts DC;
Digital Output: 250 mA 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 20k ohms;
Programmable 5 Volts, 2k ohms pull-up resistor per pin

RELAYS 1 – 4: (1) 8-pin 3.5mm detachable terminal block comprising (4) normally open, isolated relays;
Rated 1 Amp, 30 Volts AC/DC;
MOV arc suppression across contacts

COMPUTER: (1) USB Type B female, USB 1.1 computer console port

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

COM 1 – 2: (2) 5-pin 3.5mm detachable terminal blocks
Bidirectional RS-232 ports;
Up to 115.2k baud; hardware and software handshaking support

LAN: (1) 8-wire RJ45 with 2 LED indicators;
10/100BaseT Ethernet port;
Green LED indicates link status;
Yellow LED indicates Ethernet activity

IR/SERIAL 1 – 4: (1) 8-pin 3.5mm detachable terminal block comprising (4) 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;
Individual signal generator per port, allowing simultaneous firing of all ports

MEMORY: (1) MMC compatible card slot;
Accepts Multimedia Memory Card (MMC) up to 2 GB

Reset Buttons

HW-R: (1) Recessed miniature pushbutton for hardware reset (reboots the processor)
SW-R: (1) Recessed miniature pushbutton for software reset (restarts the SIMPL program)

LED Indicators

POWER: (1 green) Indicates power supplied to unit via either NET port
NET: (1 yellow) Indicates Cresnet bus activity
MSG: (1 red) Indicates processor has generated an error message

Power Requirements

Cresnet Power Usage: 8 Watts (0.33 Amps @ 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, 35mm DIN EN 60715 rail mount, DIN 43880 form factor for enclosures with 45mm front panel cutout, occupies 9 DIN module spaces (162mm)

Dimensions

Height: 3.71 in (9.42 cm)
Width: 6.26 in (15.90 cm)
Depth: 2.28 in (5.80 cm)

Weight

9.8 oz (277 g)

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MODELS & ACCESSORIES

Available Models

DIN-AP2: DIN Rail 2-Series Automation Processor

Available Accessories

DIN-1DIM4: DIN Rail Dimmer, 1 feed, 4 channels
DIN-1DIMU4: DIN Rail Universal Dimmer, 1 feed, 4 channels
DIN-2MC2: DIN Rail Motor Control, 2 feeds, 2 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-AO8: DIN Rail Analog Output Module
DIN-BLOCK: DIN Rail Cresnet Distribution Block
DIN-DALI-2: DIN Rail 2 Channel DALI Interface
DIN-EN-2X18: Enclosure for DIN Rail Devices, 2 DIN Rails, 18 Units Wide
DIN-EN-3X18: Enclosure for DIN Rail Devices, 3 DIN Rails, 18 Units Wide
DIN-EN-6X18: Enclosure for DIN Rail Devices, 6 DIN Rails, 18 Units Wide
DIN-HUB: DIN Rail Cresnet Distribution Hub
DIN-IO8: DIN Rail Versiport Module
DIN-PWS50: DIN Rail 50 Watt Cresnet Power Supply

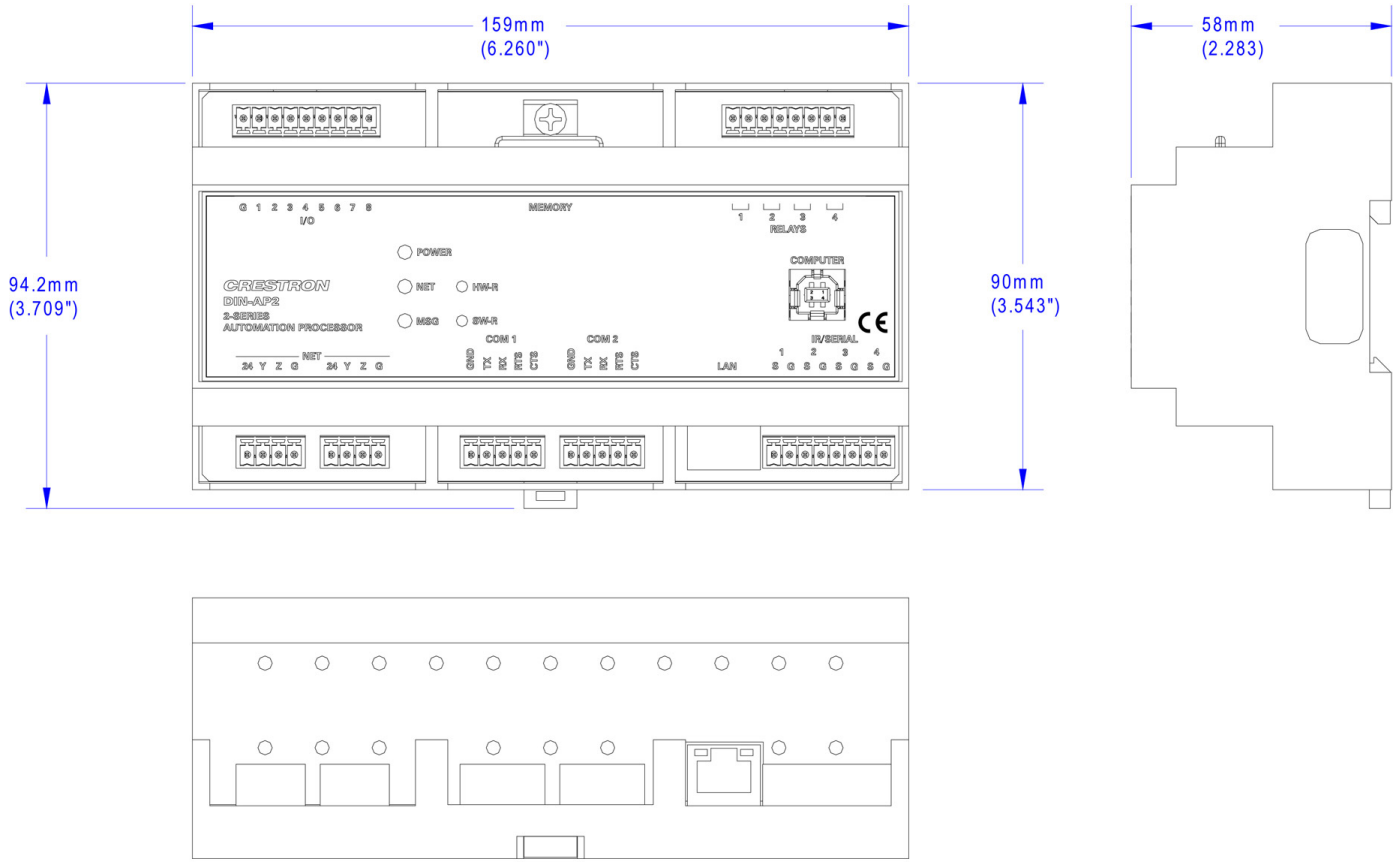
Notes:

1. Information regarding the EMerge Alliance can be found at www.emergealliance.org.

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.

Specifications subject to change without notice. Crestron is not responsible for errors in typography or photography.

CAD DRAWINGS



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