

# ACCESS POINT CONTROLLER

## OVERVIEW

The open systems facility automation market needs economical access control that provides a high level of interoperability with other multivendor building automation DDC controllers and subsystems, such as HVAC and lighting.

The Circon APC-300 Access Point Controller comes complete with all the features you expect for access control combined with a flexible, low-cost hardware platform to control one or two doors or gates, or one elevator cab.

## ACCESS CONTROL

The ADA-compliant APC-300 interfaces with standard Wiegand proximity identification devices, up to 128 bits with or without PIN verification.

The APC-300 makes intelligent decisions, independently of the host PC, for up to 10,000 access users. Access user information is stored in nonvolatile memory; batteries are not used. Because all decisions are made by the APC-300, subsecond response time is guaranteed; access is granted or denied instantaneously to restricted areas even during the busiest times of the day.

The APC-300 provides complete antipassback control, supervised inputs for door sensors, request-to-exit devices and tamper, and outputs for door locks, alarm annunciation, and automatic door openers, all configurable with industry-standard LNS<sup>®</sup>-based software plug-ins. Onboard 12 VDC power is provided for request-to-exit and door locking devices.

## DESIGNED FOR INTEROPERABILITY

To meet and exceed the market's need for a high level of LONWORKS interoperability, the APC-300 includes a powerful actions and tests capability coupled with freely assignable and type changeable input and output network variables, all configurable with LNS plug-ins.

## INTRUSION SYSTEMS INTEGRATION

Otherwise unused APC-300 supervised input points can be used to integrate with a variety of intrusion detection alarm systems and output points with alarm annunciation devices.

## ORDERING INFORMATION

Part number 10-0430



## ADVANTAGES

- Integrates seamlessly into multivendor interoperable LonWorks<sup>®</sup> networks
- Integrates with intrusion detection alarm systems
- Integrates with CCTV systems
- Includes two industry-standard Wiegand proximity reader/keypad interfaces and two door control interfaces for independent or in/out access control
- Supports multiple card formats up to 128 bits
- Stores 10,000 access users, 64 access groups and 64 schedules in powerfail protected database
- Includes a 1500-entry event and alarm log
- Supports configurable events and alarms for logging, monitoring and alarm notification; sent to Access Integrator for annunciation and archiving
- Supports antipassback control
- Supplies auxiliary 12 VDC power for peripherals
- Includes a powerfail protected realtime clock
- Includes supervised or nonsupervised-capable inputs and form C relay contact outputs
- Ships ready for construction mode operation
- LonMark certified



**SPECIFICATIONS**

**I/O CAPABILITY**

2 Industry standard Wiegand proximity reader/keypad interfaces with data0, data1, beep, LED, 12 VDC and ground.  
 6 Digital inputs Digital dry contact, supervised or non-supervised  
 1 Tamper input Digital dry contact, supervised or non-supervised; can be used as a digital input  
 4 Digital outputs Dry contact form C relay: 2.0 A maximum at 24 VAC or 24 VDC. Termination for normally open, normally closed and common; individual amber LED illuminates when relay energized.

**APPLICATION SUPPORT**

Application processor ARM7 microprocessor, 70 MHz, with 32K RAM  
 Memory 512K nonvolatile memory, 256K RAM with supercap power fail protection

**COMMUNICATIONS**

Transceiver Echelon Free Topology Transceiver (FTT 10A) at 78 kbps  
 Wire type AWG22 to AWG16 stranded. Use only twisted pair wiring and copper conductors for network.  
 Neuron® 3150, 10 MHz. Used for communications only.  
 Network jack Audio jack provides quick network access

**POWER SUPPLY**

Controller 2.0 A, 24 VAC 50 60 Hz or 24 VDC  
 External loads Aux. 12 VDC output terminal provides 1250 mA maximum  
 Fuse 2.5 A slow blow (Bussman GMD 2.5A or Littlefuse 23902.5A)  
 Power fail protection Supercap retains data in RAM and clock for up to 10 days  
 Rectifier Half wave

**MECHANICAL**

Operating temperature 32°F to 122°F (0°C to 50°C)  
 Relative humidity 5% to 95% RH (non condensing)  
 Weight 1 lb. 1 oz. (485 grams)  
 Dimensions 1.9" x 5" x 9" (48 mm x 127 mm x 229 mm)  
 Enclosure material PVC, inflammability class V0 (UL94) and metal  
 Mounting DIN rail

**AGENCY LISTINGS AND REGULATORY COMPLIANCE**

Class II device (when powered by class II supply)  
 CSA 22.2 #205-M1983, #950-M89  
 UL 916 certification for Energy Management Equipment  
 FCC Part 15, Class A of the FCC rules for Radio Frequency Devices  
 LonMark 3.4 certified, LonMark functional profile: 5035

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