



## Apollo ASP-IO168 Downstream Input/Output Board (16 Supervised Inputs & 8 Outputs)

The Apollo ASP-IO168 is a downstream, OSDP board that can expand your access control system with 16 high-precision sensor inputs and 8 relay outputs. This board allows for full control of additional doors, monitoring extensive sensor networks, and elevator control. A plug-in expansion module adds 8 more relay outputs. The ASP-IO168 communicates with the controller over a serial or network connection using OSDP or legacy Apollo protocol. Support of Offline Modes enables basic access control functionality and event reporting even when not communicating with the controller.

### Notable Features

- ▮ **FULLY ENCRYPTED COMMUNICATIONS**
  - > Whether network or serial, communication to Apollo controllers is secure
- ▮ **16 FLEXIBLE ALARM INPUTS**
  - > Supervised or Unsupervised
  - > Supports pre-defined standards and custom input-supervision values
- ▮ **8 RELAY OUTPUTS**
  - > Expandable to 16 relay outputs with plug-in expansion module
  - > Configurable pulse/activation times
  - > Supports up to 16 elevator reader floors, with floor selection feedback
- ▮ **LED STATUS & DIAGNOSTICS**
  - > LEDs for all onboard activity and hardware interface statuses
  - > Visual diagnostics via LEDs
- ▮ **MULTIPLE ASSEMBLY OPTIONS**
  - > Full IO / Inputs only / Outputs only
  - > PoE+ / Ethernet / Serial only

### Competitive Edge

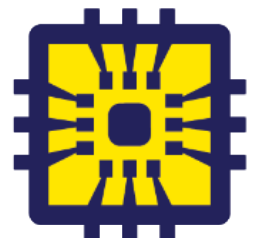
- ▮ **HIGH-PRECISION ALARM INPUTS**
  - > Supervised Input circuitry is designed with application-specific components to maintain stability and reliability in even the most extreme conditions
  - > A combination of software and hardware filtering suppresses noise and eliminates false alarms
- ▮ **ENERGY EFFICIENT**
  - > Low power consumption compared to other panels with similar hardware interfaces
- ▮ **OFFLINE OPERATION**
  - > Local, logical linking of Inputs and Outputs allows operation without controller connection
- ▮ **OSDP DEVICE**
  - > Proprietary or enhanced OSDP communication to the controller
  - > Supports OSDP Secure Channel with custom keys
- ▮ **INDUSTRIAL OPERATING TEMPERATURE (-40°C to +85°C)**
- ▮ **PoE+ OPTION**

### Security

- ▮ OSDP Secure Channel
- ▮ AES 128/256
- ▮ Encrypted firmware

### Regulatory

- ▮ UL 294, UL294B, UL1076, UL2610
- ▮ ULC/ORD C1076
- ▮ CE Compliant
  - > EN 61000-6
  - > EN 50130-4
- ▮ FCC Part 15 Class A
- ▮ RoHS



## SPECIFICATION

### INPUT POWER

- VIN 12 to 24VDC
  - > 12V board operating current: 240mA max
  - > 12V board + relay module current: 350mA max
  - > 24V board operating current: 130mA max
  - > 24V board + relay module current: 185mA max
- PoE+ option available

### GENERAL INFORMATION

- Industrial operation temperature (-40°C to +85°C)
- 5% to 95% humidity
- Dimensions: 7.5in (190.5mm) x 5.5in (139.7mm) x 0.75in (19mm)
- Weight: 0.4 pounds (181.5 grams)

### ONBOARD HARDWARE INTERFACE

- 16 Configurable Supervised/Unsupervised Inputs
- 8 Form-C Relay Outputs
  - > 2A @ 30VDC MAX rating
- 2 Unsupervised Inputs
  - > Cabinet Tamper
  - > Power Supply Fault
- Up to 1 Network Port
  - > 10/100 Fast Ethernet
- 1 Upstream RS485 Comm Port
  - > 9,600 to 115,200 baud
  - > 4-wire & 2-wire interface supported
- Expandable IO Port
  - > Plug-in module adds 8 more relay outputs
- DIP switches for configuring hardware interfaces
  - > Configure input supervision type, serial com address, & baud rate

## PRODUCT OPTIONS

Model	SKU	Description
ASP-IO168-P	421617	Alarm Module, supports 16 supervised inputs and 8 outputs, network connection, PoE
ASP-IO168-N	421618	Alarm Module, supports 16 supervised inputs and 8 outputs, network connection, no PoE
ASP-IO168-S	421619	Alarm Module, supports 16 supervised inputs and 8 outputs, serial connection only
ASP-X08	421609	8 Relay Output Expansion Module for ASP-IO168
ASP-I16-P	421620	Alarm Module, supports 16 supervised inputs, network connection, PoE
ASP-I16-N	421621	Alarm Module, supports 16 supervised inputs, network connection, no PoE
ASP-I16-S	421622	Alarm Module, supports 16 supervised inputs, serial connection only
ASP-O8-P	421623	Alarm Module, supports 8 outputs, network connection, PoE
ASP-O8-N	421624	Alarm Module, supports 8 outputs, network connection, no PoE
ASP-O8-S	421625	Alarm Module, supports 8 outputs, serial connection only
ASP-IO168-P-02	421626	Alarm Module, supports 16 supervised inputs and 8 outputs, network connection, PoE, DoE Configuration
ASP-IO169-N-02	421627	Alarm Module, supports 16 supervised inputs and 8 outputs, network connection, no PoE, DoE Configuration
ASP-IO168-S-02	421628	Alarm Module, supports 16 supervised inputs and 8 outputs, serial connection only, DoE Configuration
ASP-I16-P-02	421629	Alarm Module, supports 16 supervised inputs, network connection, PoE, DoE Configuration
ASP-I16-N-02	421630	Alarm Module, supports 16 supervised inputs, network connection, no PoE, DoE Configuration
ASP-I16-S-02	421631	Alarm Module, supports 16 supervised inputs, serial connection only, DoE Configuration

## SYSTEM DIAGRAM

