



Azure Access Technology BLU-IO168 Downstream Input/Output Board (16 Supervised Inputs & 8 Outputs)

The BLU-IO168 is a downstream, OSDP board that can expand your access control system with 16 high-precision alarm 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 BLU-IO168 communicates with the controller over a serial or network connection. 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 Azure Access Intelligent Controllers (ICs) 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 PRODUCT 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**
 - > OSDP communication to the controller with proprietary enhancements
 - > 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

AZURE BLU-IO168

SPECIFICATION

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: 8in (203.2mm) x 6in (152.4mm) 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
 - > 2-wire interface
- Expandable IO Port
 - > Plug-in module adds 8 more relay outputs
- DIP switches for configuring hardware interfaces
 - > Serial COM and Network

PRODUCT OPTIONS

Model	SKU	Description
BLU-IO168-P	801043-P	Alarm Module, supports 16 supervised inputs and 8 outputs, network connection, PoE
BLU-IO168-N	801043-N	Alarm Module, supports 16 supervised inputs and 8 outputs, network connection, no PoE
BLU-IO168-S	801043-S	Alarm Module, supports 16 supervised inputs and 8 outputs, serial connection only
BLU-X08	801400	8 Relay Output Expansion Module for ASP-IO168
BLU-I16-P	801044-P	Alarm Module, supports 16 supervised inputs, network connection, PoE
BLU-I16-N	801044-N	Alarm Module, supports 16 supervised inputs, network connection, no PoE
BLU-I16-S	801044-S	Alarm Module, supports 16 supervised inputs, serial connection only
BLU-O8-P	801045-P	Alarm Module, supports 8 outputs, network connection, PoE
BLU-O8-N	801045-N	Alarm Module, supports 8 outputs, network connection, no PoE
BLU-O8-S	801045-S	Alarm Module, supports 8 outputs, serial connection only

SYSTEM DIAGRAM

