



Azure Access Technology BLU-IO21

Downstream Input/Output Board

(2 Supervised Inputs & 1 Output)

The BLU-IO21 is a downstream, OSDP serial device that brings door-monitoring & control I/O to the door. It has supervised inputs for door contact & enter/exit actuators, and relay output for the door strike. The IO21 comes in a labeled enclosure allowing for installation anywhere. The IO21 can be installed on the same RS485 bus as OSDP readers. When used with controllers utilizing extended reader licenses, the IO21 quickly reduces cost-per-door.

Notable Features

▮ FULLY ENCRYPTED COMMUNICATIONS

- > Serial communication to Azure Access Intelligent Controllers (ICs) is secure

▮ 2 ALARM INPUTS

- > Supervised or Unsupervised
- > Supports pre-defined standards and custom input-supervision values

▮ 1 RELAY OUTPUT

- > Configurable pulse/activation times

▮ LED STATUS & DIAGNOSTICS

- > LEDs for all onboard activity and hardware interface statuses
- > Visual diagnostics via LEDs

▮ DOOR MONITORING & CONTROL AT THE “EDGE”

- > Ability to multi-drop BLU-IO21 devices on same RS485 bus as OSDP readers for minimal wiring to the door
- > Custom enclosure, with all connections labeled
- > Can share power with 12VDC readers

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

▮ REDUCED COST PER DOOR

- > Installations of controllers using expanded reader licenses can utilize the IO21 to provide IO for door monitoring and control beyond the number of IO connections natively on the controller

▮ 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)

Security

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

Regulatory

- ▮ CE Compliant
- > EN 61000-6
- > EN 50130-4
- ▮ FCC Part 15 Class A
- ▮ RoHS

AZURE BLU-IO21

SPECIFICATION

INPUT POWER

- 12 VDC; 28mA Max current

GENERAL INFORMATION

- Industrial operation temperature (-40°C to +85°C)
- 5% to 95% humidity
- PCB Dimensions: 1.88 in (47.75mm) x 1.9in (48.26mm) x 0.53in (13.46mm)
- Enclosure Dimensions (including flanges): 2.16 in (54.86mm) x 3.35in (85.19mm) x 0.77in (19.56mm)
- PCB Weight: 0.038 pounds (17.24 grams)
- PCB + Enclosure Weight: 0.086 pounds (39 grams)

ONBOARD HARDWARE INTERFACE

- 2 Configurable Supervised/Unsupervised Inputs
- 1 Form-C Relay Outputs
 - > 2A @ 30VDC MAX rating
- 2 Pushbuttons for configuration
- 1 Upstream RS485 Comm Port
 - > 9,600 to 115,200 baud
 - > 2-wire interface supported

PRODUCT OPTIONS

Model	SKU	Description
BLU-IO21	801010	Downstream IO panel, supports 2 supervised inputs and 1 output, serial RS485 connection

SYSTEM DIAGRAM

