



Azure BLU-RI4 Downstream Reader-Interface Board (4 Readers, 12 Supervised Inputs, 8 Outputs)

The BLU-RI4 is a downstream, OSDP reader-interface board. It features 4-door control with four combo TTL / OSDP reader ports, twelve supervised inputs, and eight relay outputs. The BLU-RI4 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 Controllers (ICs) is secure.
- ▮ **4 READER PORTS**
 - > Both reader ports support TTL (Weigand etc.) or RS485 (OSDP) readers, including biometrics
 - > Supports paired readers
- ▮ **12 FLEXIBLE ALARM INPUTS**
 - > Supervised or Unsupervised
 - > Supports pre-defined standards and custom input-supervision values
- ▮ **8 RELAY OUTPUTS**
 - > Configurable pulse/activation times
- ▮ **LED STATUS & DIAGNOSTICS**
 - > LEDs for all onboard activity, hardware interface statuses, & visual diagnostics
- ▮ **MULTIPLE ASSEMBLY OPTIONS**
 - > 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 that can operate without involving the controller
 - > Offline Modes allow for basic access control functionality when not communicating with 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
- ▮ FCC Part 15 Class A
- ▮ RoHS

AZURE BLU-RI4

SPECIFICATION

POWER

- ▶ VIN 12 to 24VDC
 - > Board operating current: 310mA max @ 12VDC
 - > Full-load (powering peripherals) current: 3.32A max
- ▶ Aux power output port to power door strikes or other peripheral devices (2 Amp)
- ▶ Reader power connection on each Reader Port (500mA max per port)
 - > VIN Passthrough (2A max)
 - > Regulated 12VDC (1.2A combined max)

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 (19.05mm)
- ▶ Weight: 0.6 pounds (272 grams)

ONBOARD HARDWARE INTERFACES

- ▶ 4 Reader Ports supporting both TTL and RS485
 - > Single-wire and two-wire LED control support
 - > Open collector buzzer output
- ▶ 12 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
- ▶ DIP switches for configuring hardware interfaces
 - > Serial COM and Network

PRODUCT OPTIONS

Model	SKU	Description
BLU-RI4-N	801051-N	RS-485 Serial communication with Ethernet
BLU-RI4-S	801051-S	RS-485 Serial communication

SYSTEM DIAGRAM

