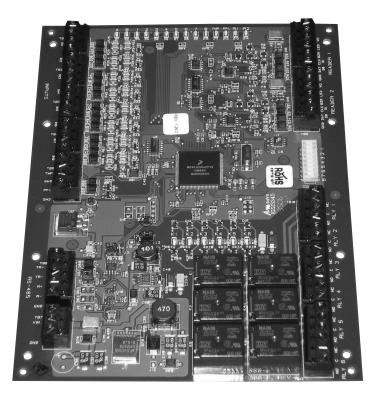


The Two-Reader Board is the interface between any IDenticard® PremiSys™ controller and up to two card readers. The board also incorporates eight input points and six output relays that can be used for door functions such as door-position monitoring, request-to-exit, door locks or for other purposes within the access control system. The Two-Reader Board supports ABA-and Wiegand-format readers in a wide variety of reader types, including smart card and biometric readers, as well as keypads.



### **Features**

- Communications with controllers or MUXes are two-wire RS-485.
- Each of two reader ports provides the following connections: input power, card data (Clock & Data or Data 1 & Data 0), LED, buzzer and ground.
- The Two-Reader Board can be housed in a sturdy and optionally lockable enclosure with its controller and/or other components.
- The Two-Reader Board itself includes the following components:
  - ~ Six relays configurable for normally open or normally closed operation
  - ~ Eight general-purpose input points that can be supervised or not to serve as door-input points, request-to-exit points, etc.
  - ~ Two dedicated input points for monitoring power loss to the board and enclosure tampering
  - ~ A DIP switch for addressing the board and setting other parameters
  - ~ LEDs to indicate board and relay status

# PremiSys™ Two-Reader Board

## PremiSys<sup>™</sup> Two-Reader Board

## **Specifications**

#### **Board Certifications**

UL: recognized to UL 294: Access Control System Units - component CE: EN55022, EN50082-1, IEC801-2, IEC801-3 and IEC801-4

#### **Dimensions and Weight**

Board Width	8.0 inches (203 mm)
Board Height	6.0 inches (152 mm)
Board Depth	1.0 inch (25 mm)
Board Weight	11 ounces (312 g) (nominal)

#### **Environmental Specifications**

·	32°F to 158°F (0°C to 70°C) operating
	-67°F to 185°F (-55°C to 85°C) storage
Relative Humidity	0 to 95% RH noncondensing

#### **Power Specifications**

#### CAUTION! This component is intended for use only in a Class 2, low-voltage circuit!

Two-Reader Board Input Voltage	$12\text{VDC} \pm 10\%$ , 550 mA peak (plus reader current),
	450 mA (plus reader current) nominal
Relay Rating (each of six relays)	5 A at 28 VDC, noninductive load
Card Reader Power	12 VDC ± 10% regulated, 125 mA max. each reader,
(each of two readers)	or 12-24 VDC $\pm$ 10% (input voltage passed through),
	125 mA max.each reader; min. 20 VDC at input needed
	to yield 12 VDC at reader port
Reader LED Output	TTL-compatible; high > 3 V, low < 0.5 V;
	5 mA source/sink maximum
Reader Data Inputs	TTL-compatible inputs

#### **Wiring Specifications**

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Power to Two-Reader Board	One twisted pair, 18 AWG (0.823 mm²)
RS-485 Connections	Twisted pairs, 22 AWG (0.325 mm²), with shield.
to Controllers	Maximum cable length: 4000 feet (1219 meters) of wire,
	total copper, including drops
Connection to	Use wire and gauge as required by load
Relay-Controlled Devices	
Connection to	One twisted pair per input, 30 ohms maximum
Input-Point Devices	
Connection to Readers	Refer to the reader manufacturer specifications for cabling
	requirements. Maximum cable length: 500 feet (150 m),
	total copper, including drops.

#### **Communications Specifications**

To Controller or MUX	Two-wire RS-485, via TB1, 2400 to 38,400 bps

#### **Access Control Specifications**

Access Control Specifications	
Inputs – Assignable	Eight input points, end-of-line (EOL) resistors,
	1K/1K ohm 1% ¼ watt standard
Inputs – Dedicated	Two unsupervised, dedicated input points for enclosure tamper and power loss
Relays	Six relays configurable for normally open or normally closed operation
Relay Contact Type	Form C
Relay Configuration	Single-pole double-throw (SPDT)

#### Indicators

Visible	Twenty red, single-color LEDs