

IAD-4514

Intelligent Access Device

SafeCryptNet



The IAD-4514 provides real time control and processing for access control, alarm reporting and remote control operation in the security environment. The IAD-4514 has four high-speed communication ports and comes standard with 4 MB Ram (Expandable to 16MB). The IAD-4514 supports interfacing with four card readers, 14 supervised inputs, and 5 outputs to provide access control at two doors with two readers or at four doors with an individual reader at each door.

Hardware

- ◆ Built-in auto-resetting fuse
- ◆ Built-in power supply/charger
- ◆ 4 serial ports (19200 to 2.5meg baud)
- ◆ 26 self-diagnostic status LED's
- ◆ Four reader interfaces
- ◆ 14 supervised or non-supervised inputs
- ◆ EOL termination can be set to different values on each supervised input
Supervised inputs designed to exceed UL Grade AA
- ◆ Five outputs relays
- ◆ AC/DC operations, 12 VDC to 24 VDC, 16 VAC nominal

Readers

- ◆ The IAD-4514 is designed to communicate with almost all known reader formats. Eight custom formats supporting up to 175 bits are provided which can be used on any or all reader inputs. The custom formats enable successful integration of smart card (including PVII CAC Cards), Biometric, and barcode readers
- ◆ The IAD-4514 also supports four RS-485 Readers. (requires firmware upgrade from factory)
- ◆ Standard memory provides up to 3000 users although with memory upgrades the IAD-4514 can support up to 500,000 users
- ◆ 8 custom card formats
- ◆ 1500 PLC controls commands
- ◆ Fused output voltage for all readers

Inputs

Inputs are digitized by an A/D converter and are processed according to the configuration parameters set at the Host. This provides the convenience of using simple contact inputs or the security of full line supervision with the addition of End of Line (EOL) terminators.

Outputs

There are five outputs provided, which are typically used for switching door strikes or other signaling devices. Each output is a Form C contact rated at 5A 30 VDC or 3A, 120/220 VAC.

Communication Ports

The IAD-4514 has 4 high-speed serial communication ports. Port one is used as the primary Host communication port. The second port can be used for dialing out to a central station or to communicate to lower panels (IAD-810's). The ports can be configured for either RS-232, RS-485, TCIP, Modem, or Fiber Communications depending on the type of module installed and the configuration of the system. The IAD-4514's communication speed is variable and can be set at 9600 and up to a 2.5meg baud rate. The third port is for communicating with a keypad using RS-485 or RS-232 communication. The fourth port is utilized for updating firmware to the panel.

Lower Communications

The IAD-4514 can support 3 ICD-810 expansion boards, each providing an additional 8 inputs and 10 outputs. Additionally each ICD-810 can support up to two ECD-43 daughter boards for an additional 4 inputs and 3 outputs bringing the total to 16 outputs and 16 inputs per ICD-810. Please reference the ICD-810 cut sheet for additional information

Specifications

POWER REQUIREMENTS:

AC input: 16 VAC, 1.75A RMS
DC input: 13 VDC, 1.25A
Static RAM Battery: CR Lithium Coin Cell Batteries 3V 23 X 3.0 MM 265mA

PROTECTIVE FUSE:

All fuses are auto-resetting except F10 which is a 3A 125 Volts Slow-Blow Fuse

READER WIEGAND INTERFACE:

8 User definable 1 to 175 bits user selectable formats
Formats

READER RS485 INTERFACE:

Custom Formats available from Manufacturer

RELAY CONTACTS:

Form C, 5 amps at 24 VDC
Form C, 2 amps at 125 VAC, Resistive

Card reader sourcing: 300 mA total max

Solid state buzzer outputs: Open collector, 100 mA at 12 VDC

COMMUNICATION PORT:

Module selectable, RS232, RS485, Ethernet 10/100*, Modem, and Fiber daughter boards

*SafeCryptNet encryption technology is available on Ethernet daughter board (NECC-1).

CABLE REQUIREMENTS:

Reader data: 6 conductors, 18AWG, 500 feet(150m)maximum

RS-485 (2-wire): 1 twisted pair, shielded; 120 ohm, 4000 feet (1219 m) maximum.

RS-232 (4-wire): 5 conductor, shielded; 50 feet (15 m) maximum

Alarm inputs: One twisted pair per input, 30 ohms maximum

Power Input: 1 twisted pair, 18 AWG

Power Fault Input: 1 twisted pair, 24 AWG

Cabinet Tamper Input: 1 twisted pair, 24 AWG

OPERATING ENVIRONMENT:

0 to 70 °C, operating (options -20 to +85°C)

-55 to +85 °C, storage (options -40 to +105°C)

LCD Display 0 to 70 °C, operating (only required for setup)

0-95% RH, non-condensing(option formal coded)

DIMENSIONS:

9.5 in (L) 7.5 in (W) 2.5 in (H)
(241.3 mm) (190.5 mm) (63.5 mm)