



Smart Card Technology

User-programmable, versatile, secure

Overview

The Alliance System smart cards and smart tags operate with the AL-1623 programmer and the Alliance Manager software. Together, these products let the installer, service provider, and/or customer program and reprogram the cards, and issue them on-site to users.

Innovative Proximity Readers

The Alliance System smart card readers connect directly on the RS485 data bus of the control panel or intelligent 4-door controller and may be configured and addressed from a LCD keypad. Some security options (site code and 4-byte security code) must be programmed with Alliance Manager software and configuration cards.

4-byte Security Code

Security for the card and programmer combination is extremely high with the ability to program a unique 4 billion, 4 byte combination security code for each customer. Once this code has been created, downloaded to the programmer, and programmed into the card, the card memory can't be read or even recognized at any other reader or programmer/software combination (AL-8100).

Communication between Alliance Manager software and the programmer may be password protected to prevent the 4- byte security code from being uploaded from the programmer to another machine with AL-8100 software.

Read/Write Encryption

The Alliance System smart card technology also features an exclusive read/write encryption. When a card is presented at a reader, data is downloaded into the reader, encrypted, and rewritten back into the card.

Pay Per Use Application

The readers may be configured to operate in stand-alone and control devices such as office equipment or vending machines. This function allows credits to be assigned on user cards and deducted by the readers, purely on a usage basis.

Up to 65,535 credits may be allocated in up to four different banks with 16 access levels and four locations. The reader determines the bank from which credits have to be deducted and the number of credits per valid presentation.

High Quality Cards and Tags

Both the smart chip and antenna are embedded inside the cards and tags. Printing is possible on the cards using any industry standard printer. The AL-1472 cards feature a programmable magnetic stripe for Time & Attendance or other applications.



Alliance System Smart Card Technology

Standard Features

- **Innovative proximity readers**
- **Smart Cards are reprogrammable with AL-1623 smart card programmer**
- **High security 4-byte security code and read/write encryption**
- **Pay per use application**
- **High quality cards and tags**

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Specifications

AL-1191 / AL-1193 Card Readers

Power Supply

- Supply voltage: 9 to 14 VDC
- Current consumption in standby: 25 mA
- Current consumption during card read: 80 mA

Inputs, Outputs, and Connectivity

- Programmable Open Collector output pulse from 1 msec to 25 seconds
- Request to Exit input
- Connectivity through RS485 data bus device or standard Wiegand for connection on the 4 readers inputs of the AL-1255

Physical and Environmental

- Read range: 2" to 3"
- Optical pry-off tamper sensor included
- Maximum distance from panel: 5,000'
- Suitable for outdoor use (full epoxy-filled weatherproof construction)
- LEDs (red and blue) configurable as nightlight, lock status or alarm area status
- Dimensions (AL-1191): 1.34" x 4.33" x 0.67"
- Dimensions (AL-1193): 1.65" x 5.87" x 0.59"
- Operating temperature: 32° F to 122° F
- Regulatory UL/FCC, UL294, UL365, UL609, UL1610, UL1635

AL-1623 Card Programmer

Power, Physical and Environmental

- 9 VDC power pack (included)
- Current consumption: max 75 mA
- Operating temperature: 32° F to 122° F
- Humidity 95% non-condensing
- FCC

Inputs, Outputs, and Connectivity

- Serial cable with RS232 connectors (included)
- PC running Alliance Manager software is required

Ordering Information

Part Number	Main Product Offering
AL-1191	Alliance smart card reader includes white snap-on cover and 8' cable
AL-1193	Heavy-duty Alliance smart card reader includes 8' cable
AL-1623	Smart card programmer with RS232 lead and transformer
AL-1470	Proximity cards 3.38" x 2.13"
AL-1473	Smart tag
AL-1472	Proximity cards with a standard ABA three-track magnetic stripe 3.38" x 2.13"
AL-1660	AL-1191 white snap-on covers (10 pieces)
AL-1661	AL-1191 red snap-on covers (10 pieces)
AL-1662	AL-1191 gray snap-on covers (10 pieces)
AL-1663	AL-1191 beige snap-on covers (10 pieces)
AL-1664	AL-1191 black snap-on covers (10 pieces)
AL-1665	AL-1191 light gray snap-on covers (10 pieces)



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