1500 Controller Series
LANLink™ | RS-485

The Sielox 1500 controller manages from 2 doors up to 16 doors in the large configuration or from 2 doors up to 4 doors with the small configuration. It includes a built in power regulator / UPS / battery charger module that keeps the controller working in the event of a power failure.

Communication options include Ethernet (LANLink™ 1500) or RS-485 (AC-1500). When used in conjunction with the X-LAN, up to 32 doors can be managed with a single Ethernet connection.

Features:

- **Reader Types** – FIPs 201, Standard 26 bit Wiegand, Sielox format, HID Corporate 1000, ANSI Wiegand
- **2 to 8 Door Controllers** - Add 2 door Terminal Controller (TC) modules to the backplane
- **I/O Expansion Board Option** – Expand with an additional combination of 56 Inputs / 56 Outputs
- **Communication** – Ethernet, RS-485 or a combination of both (X-LAN)
- **Auto-Configuration** – Automatically detect and configure individualTerminal Controller modules within the Pinnacle™ software application
- **ProgrammableFlash ROM**– Upgrade firmware without chip replacement
- **MaintenancePort** – Perform infield diagnostics and updates using the onboard serial port
- **Legacy Upgrade Path** – Convert 8-bit and 16-bit Sielox controllers with AC-1500S kits
- **Battery Charger** – with Main Power loss signal
- **Lithium battery backup** – keeps the cardholder database, off-line events and RTC running in case of power loss
- **Status lights** – for lithium battery, communications and power
- **Certifications** – FCC part 15, ETL certified to UL 294 and UL 1076

AC-1500-LESR-x
2-8 Door Controller

AC-1500-LESR-2IO
2 Door I/O Controller

AC-1500-SENR-x
2-4 Door Controller
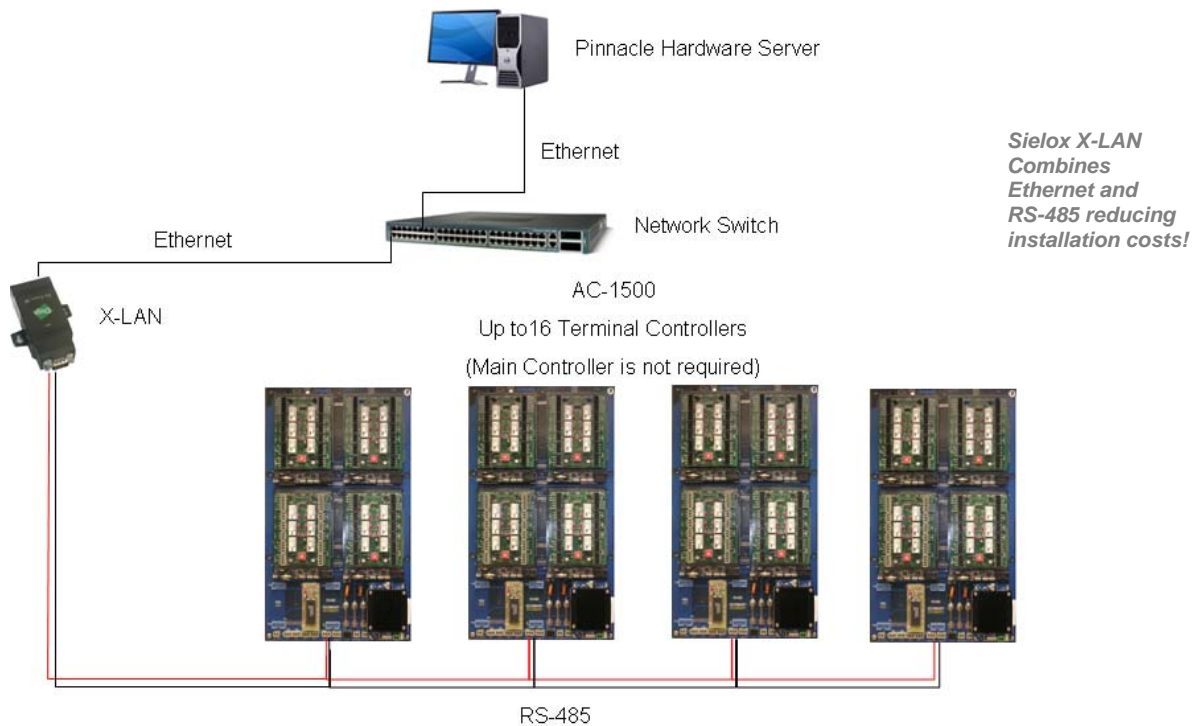
AC-1500-LESN-NIO
I/O Controller

From 2 doors expandable up to 16 doors in one enclosure!

Sielox's 32-bit modular backplane provides for unmatched modular configuration in a distributed network architecture.

Managing each set of 2-doors are Terminal Controller modules (TCs). TCs store each cardholder and reader configuration until it's updated from the command center server, giving the TCs the ability to maintain access control even if the command center goes down, manage inputs and outputs, manage card readers, and lock and unlock doors.

Main Controllers (MCs), with 2-door capability themselves, have traditionally served as the intermediary between the command center and with each main controller is capable of managing up to 16 Terminal Controllers. Communications from the command center server to the MC/TC network continues to be the design of choice for serial communications.
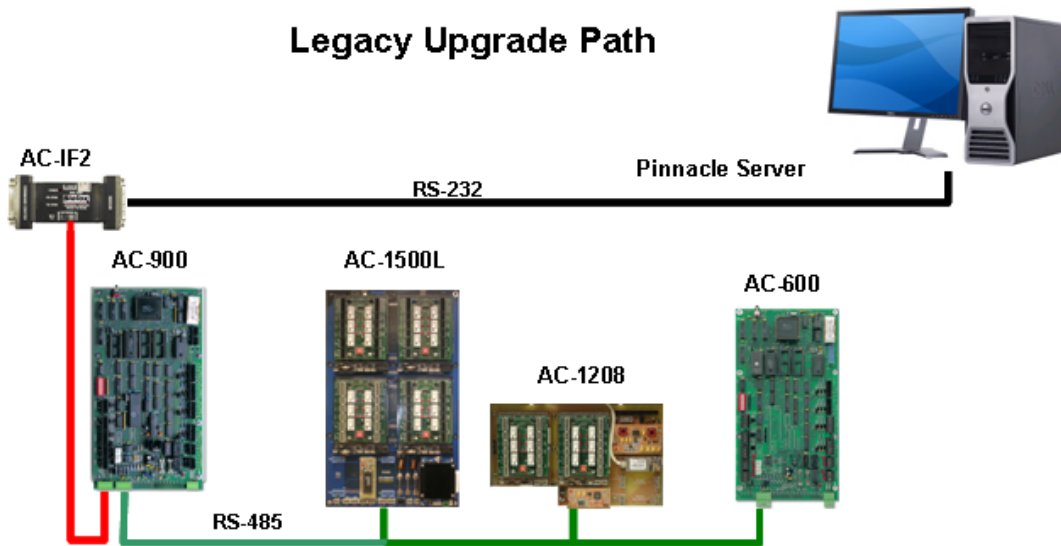

Sielox X-LAN Combines Ethernet and RS-485 reducing installation costs!

No Controller Left Behind

Sielox develops new software keeping the compatibility with 8 bit and 16 bit controllers, giving the end user the flexibility to upgrade an installation without replacing the legacy controllers.
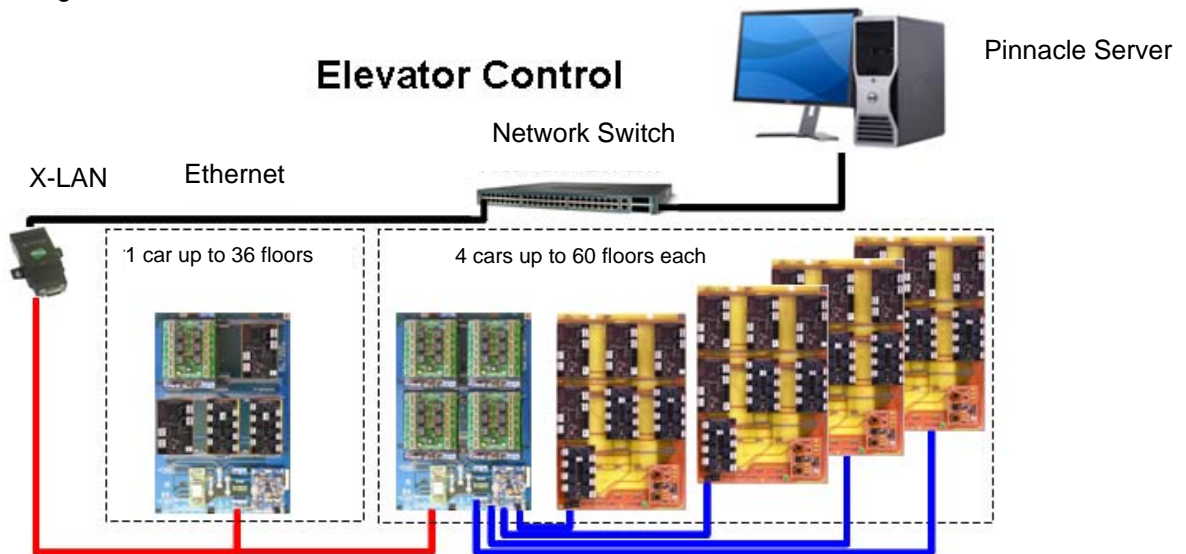
Legacy Upgrade Path

AC-IF2 — Pinnacle Server — RS-232

AC-900   AC-1500L   AC-1208   AC-600

RS-485

Elevator Control

Each Controller supports up to 60 floors, giving your elevator access control no other security product can match. The unique Access Level Output Control (ALOC) functionality defines the time zone during which a cardholder has access to their assigned floors.

Elevator Control

Pinnacle Server

Network Switch

X-LAN   Ethernet

1 car up to 36 floors   4 cars up to 60 floors each

Product Specifications

General
Backplane Dimensions
AC-1500L: 14.95" x 8.60" (37.9 cm x 21.8 cm)
AC-1500S: 10.50" x 8.65" (26.7 cm x 21.9 cm)
Power Requirements
Input Voltage Range:10 to 25 VDC
Output 1: 12 VDC 2 A
Output 2: 5 VDC 3 A
2.9 amps sustained max without readers[1]
Lead Acid Battery Charger: 14.4 VDC 500mA
Operating Conditions
0° to +50°C; 90% relative humidity, operating
(non-condensing)
Backward compatible with AC-1200 Modules

Certifications
FCC part 15
ETL Certified to UL 294 and UL 1076 Standards

Terminal Controller (TC) Modules
2-Door TC Modules
Supports two doors with four inputs four outputs
Capacity
32-bit CPU with storage for 10K buffered events; for 26-bit
cards, up to 50K cards with one access level per cardholder
or 25K cards with three access levels per cardholder
(card type and use of PIN dependent)
Access Levels: 256 per TC[2]
Time Zones: 64 per TC (2 fixed as "never" and "always")
Lithium Battery
Retains RAM memory and real-time clock operation for more
than 2 years.
Communication status LED's on the CPU Module
Hot swap power modules
Expansion Input Module
Provides eight user-defined inputs, supervised or
unsupervised.
Expansion Output Module
Provides eight user-defined outputs

Devices
Doors
Each door includes door strike output, door switch input, and
request-to-exit input
Readers
Supports all standard industry formats, including Performa®
and Mirage® proximity and others currently supported by
Sielox controllers
Inputs
User-defined dry contact relays with supervision
Outputs
User-defined SPDT dry contact relays, 2A max at
24 VDC or 24 VAC

Cables
Ethernet CAT-5 or CAT-6
RS-485 Shielded dual twisted pair, 22 AWG
(4,000 feet maximum) Belden 8723
RS-232C Shielded nine conductor, 22 AWG
(20 feet maximum)
Readers/Keypads
Shielded five conductor, 18 AWG
(500 feet maximum) West Penn 3280
Inputs Shielded twisted pair, 22 AWG
(500 feet maximum) Belden 8761

AC-1500L Configurations
Large Backplane

	Model	Doors	Std I/Os	Exp I/Os
2-Readers	AC-1500-LES*-2	2	4/4	56
4-Readers	AC-1500-LES*-4	4	8/8	112
6-Readers	AC-1500-LES*-6	6	12/12	168
8-Readers	AC-1500-LES*-8	8	16/16	224
2 Readers I/0	AC-1500-LES*-2IO	2	4/4	32
56 I/O Expansion	AC-1500-LESN-NIO	–	–	56

AC-1500S Configurations
Small Backplane

	Model	Doors	Std I/Os	Exp I/Os
2-Readers	AC-1500-SES*-2	2	4/4	32
4-Readers	AC-1500-SES*-4	4	8/8	0
2 Readers I/0	AC-1500-SESx-2IO	2	4/4	32

Retrofit configurations available for AC-300 legacy replacements.
*Accessory modules for use with indicated backplane assemblies: 2-door Terminal
Controllers (TCs), and Input and Output expansion kits*
* Add "L" for LANlink™ or "R" for RS-485 comm. Modules

1. Sustained power consumption breakdown:
Each TC Module = 375mA
12V Power Converter Module = 70mA
5V Power Converter Module = 20mA
RS-485 COM Module = 110mA

*2. Pinnacle further supports (i) access levels sent to each controller in order of priority, on an as-
needed basis, per the capacity stated and (ii) server authorized enhanced assists for cardholder
access levels of lower priority.*

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