



Avalon Series

Aesthetics Swing Barrier

The Avalon Series Swing Barrier represents a pinnacle of access control engineering, integrating advanced CGL assembly technology with precision-engineered security solutions. Utilizing tempered glass and acrylic components, the barrier delivers superior structural integrity and sophisticated design. Equipped with ARMATURA core technology, it provides comprehensive security through multi-layered detection systems, including infrared, mechanical, and electric current monitoring.

Designed for high-performance environments, the Avalon Series offers customizable authentication methods, dynamic lighting interfaces, and modular configurations. Its innovative architecture ensures seamless integration into premium facilities, balancing cutting-edge technological functionality with elegant, minimalist aesthetics.



Innovative Structure

- The design incorporates CGL assembly technology, which draws inspiration from ancient joinery techniques. This innovative approach significantly reduces the need for screws, creating a more seamless and efficient assembly process.
- ARMATURA core technology for advanced swing arm control.

Advanced Detection

- 12 pairs of military-grade infrared sensors with matrix-style photoelectric 3D detection. Anti-tailgating, anti-reverse entry, and anti-clamping functionalities.

Safety-Oriented Design

- Rounded edges for user safety.
- Multi-layer anti-clamping system (infrared, mechanical, and electric current detection).

User-Friendly Operation

- Configurable passage modes: Controlled, Free, or Prohibited Passage.
- Automatic reset and passage memory for up to 255 requests.
- Direction indicators and status lights for easy navigation.

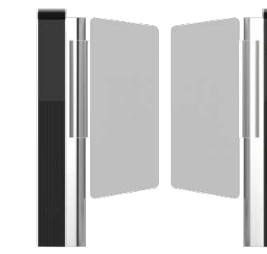
Multiple Authentication Options

- Supports RFID, QR Code, Mobile Credentials, Fingerprint, Palm Recognition, and Facial Recognition.
- Multi-factor authentication combinations are available for enhanced security.

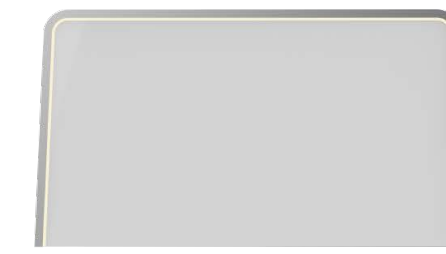
Disabilities Friendly:

- Wide walkway options (up to 36.22" (920mm)) for wheelchair access or easier mobility.
- Accommodates wheelchair or child passage management with side-mounted RFID and QR code readers.

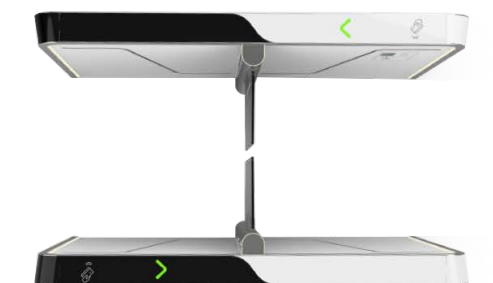
Product Views



Front View



Side View



Top View

Performance & Safety Features

Power-On Self-Test

- Automatically detects hardware and functional issues at startup.

Power-Off Fail-Safe

- Swing arms unlock during power failure for emergency evacuation.

Anti-Clamping Functionality

- Infrared Detection
Prevents collisions by detecting objects or individuals in the swing arm area.
- Mechanical Detection
Stops movement if the swing arm encounters an obstacle.
- Electric Current Detection
Monitors collision force to ensure it stays within a safe range.

User Guidance

Illuminated Indicators

- Direction and passage status lighting (green for open, red for blocked).
- Flowing green lights for an intuitive experience.

Ambient Lighting

- Sci-fi lighting design to enhance aesthetics and guide users.

Emergency Features

- Emergency Mode
Doors unlock automatically during power failure or fire alarm activation.
- Anti-Panic Functionality
Swing arms can be manually pushed open during emergencies.

Certifications

- CE, FCC Certified (Compliant with international safety and quality standards)

Product Overview

Adaptive Ambient Lighting

Discreet ambient light alternates between light and dark according to the environment.

12 Pairs of Infrared Sensors

A new layout of 12 pairs of military-grade infrared sensors with matrix-style photoelectric 3D detection is designed to provide enhanced protection for pedestrians by detecting movement and potential hazards, ensuring greater safety in public and private spaces.

Elegant Tempered Glass Design with Ambient Lighting

The large area covered in tempered glass and the circular smooth lines showcase high-end beauty. The fuselage surface features a minimal design, intelligent ambient lighting, and seamless adaptation to upscale environments.

Reliable Motor Technology German-made DC Brushless Power

The Avalon is powered by a German-made DC Brushless Motor, known for its exceptional reliability and efficiency. This advanced motor technology ensures smooth, quiet operation while providing superior performance and longevity.

Product Features

User-optimised Scanner Integration

Avalon offers comprehensive integration capabilities with multiple credentials and access terminals for verification. This includes technologies such as RFID, QR codes, facial recognition, and palm recognition. These features are designed to accommodate a wide range of users and various access scenarios, enhancing security and flexibility in user management.

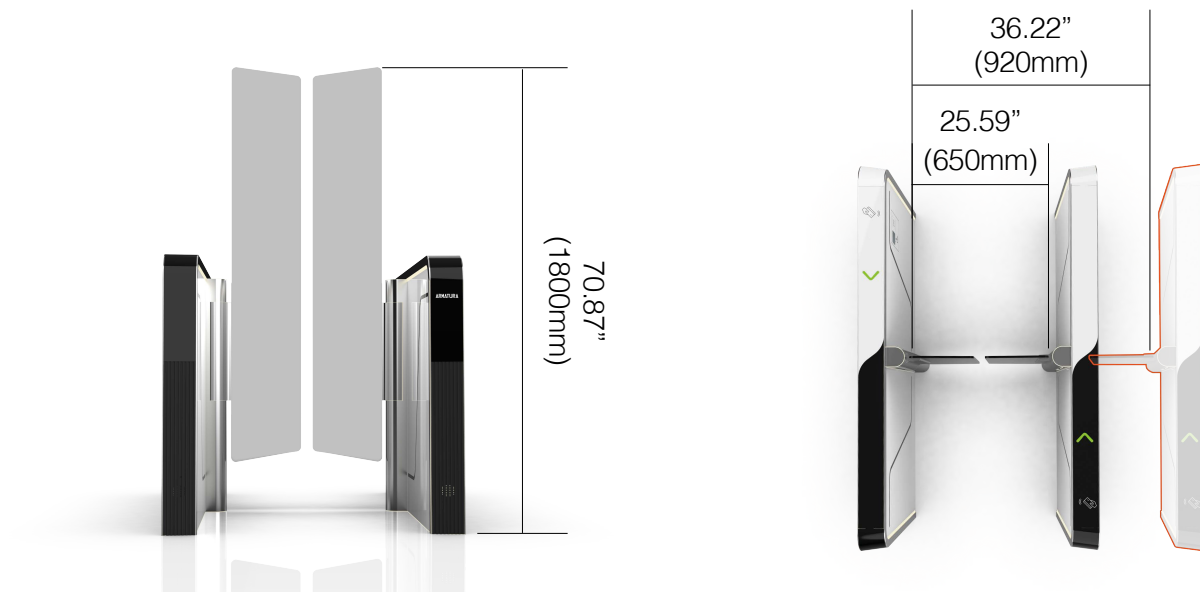


Multi-factor authentication options available.



Optional Enhanced Security and Accessibility (Width & Height)

The system supports an optional 70.87" (1800mm) high barrier, providing added security and safety by effectively controlling access and preventing unauthorized entry. Additionally, the passage width has an optional 36.22" (920mm), which is barrier-free for wheelchairs, luggage, and material transport



Automatic Linkage Elevator DCS

The seamless elevator integration of the Avalon Series gate is enabled through the DCS (Destination Control System) in conjunction with the Armatura One software and the AHDU controller. When the identification module reads a passer's identity, the system communicates with the elevator via this advanced integration. The designated elevator is displayed on the screen, and the user is automatically directed to the corresponding floor. This fully touchless process eliminates the need for manual input or remote control settings, delivering a highly efficient and advanced user experience.



CGL Assenbly Structure

By replacing the traditional sheet metal welding structure with a design inspired by the tenon and mortise joints of ancient buildings, and utilizing the newly developed CGL assembly technology, the integrity and stability of the brake structure will reach new heights.



Customisation

Simple installation and easy maintenance, customizable to suit specific scenarios, and capable of meeting a wide variety of needs. It is widely used in commercial building lobbies, office buildings, hotels, and other locations

Options and Customization

- Swing Arm Materials: Acrylic or tempered glass.
- Authentication Methods: Face, Palm, Fingerprint, RFID and QR Code.
- Chassis Color: Standard White, with Customization Options Available.

Anti-Clamping Functionality

The anti-clamping function in automatic doors detects obstructions to prevent injury or damage by stopping or reversing the door's movement. This crucial safety feature is essential for public safety and regulatory compliance.

1 Electric Current Detection:

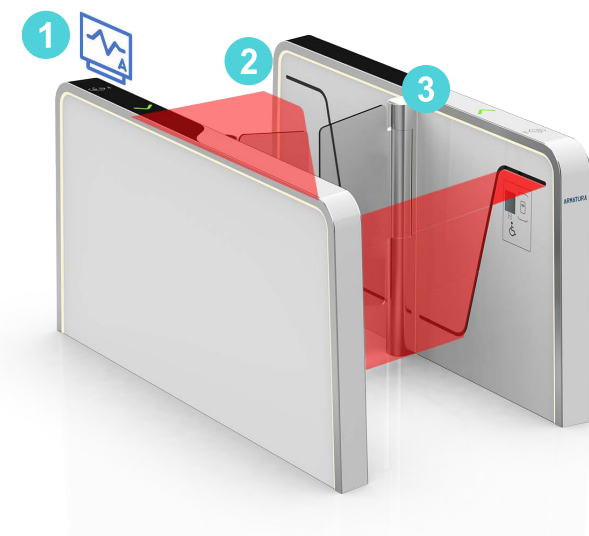
Monitors collision force to ensure it stays within a safe range.

2 Infrared Detection:

Prevents collisions by detecting objects or individuals in the swing arm area.

3 Mechanical Detection:

Stops movement if the swing arm encounters an obstacle.



Enhancing Identification Capabilities for Diverse Users

Allow for different heights of users to achieve various identification capabilities, accommodating individuals in wheelchairs (ADA Compliance), children, and those using pushchairs. By designing a flexible and inclusive system, we empower a diverse range of users to successfully verify their identity through facial recognition, palm scans, fingerprinting, and RFID card reading.



The width of the Avalon Series is in the range of 31.49" - 39.37" (800 - 1000mm), which is a good fit for people including those with baggage, individuals with children, wheelchair users, and families with pushchairs.

Range of Width	Person	Person with Baggage	Person with Child	Person with Stroller	Person with Wheelchair	Person with Backpack	Person with Suitcase	Person with Child	Person with Stroller	Person with Wheelchair	Person with Backpack	Person with Suitcase
≤ 23.62" (600mm)	●	●	●	●	●	●	●	●	●	●	●	●
23.62" - 31.49" (600 - 800mm)	●	●	●	●	●	●	●	●	●	●	●	●
31.49" - 39.37" (800 - 1000mm)	●	●	●	●	●	●	●	●	●	●	●	●
39.38" - 59.06" (800 - 1500mm)	●	●	●	●	●	●	●	●	●	●	●	●

● Applicable ● Not recommended ● Not Applicable

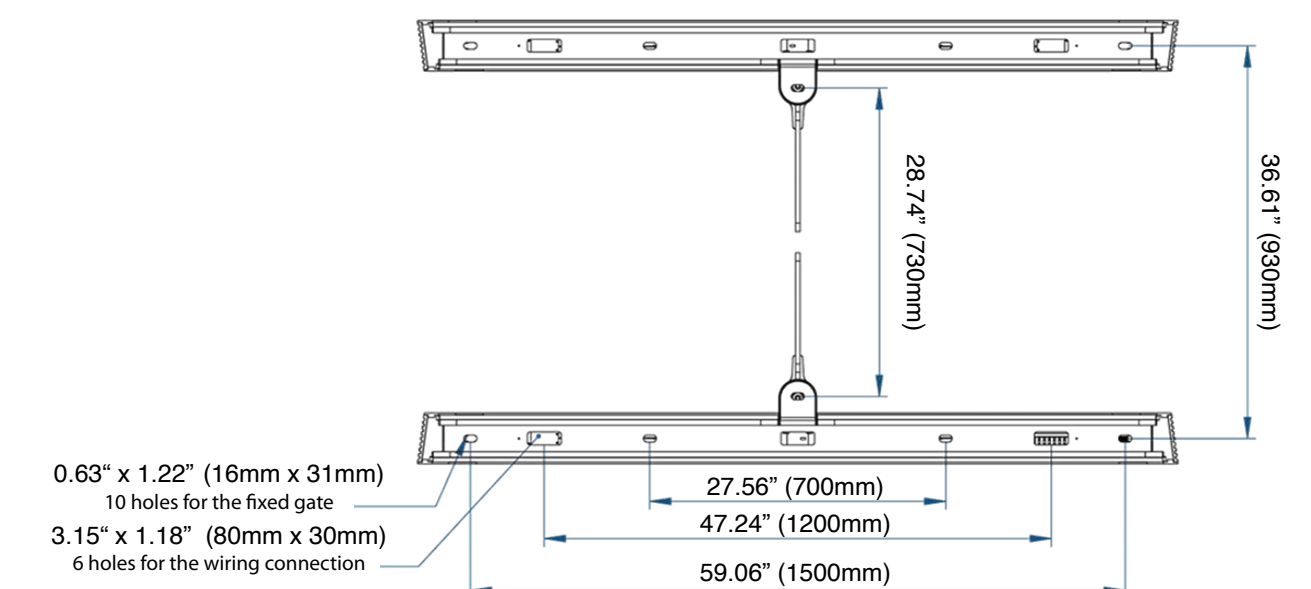
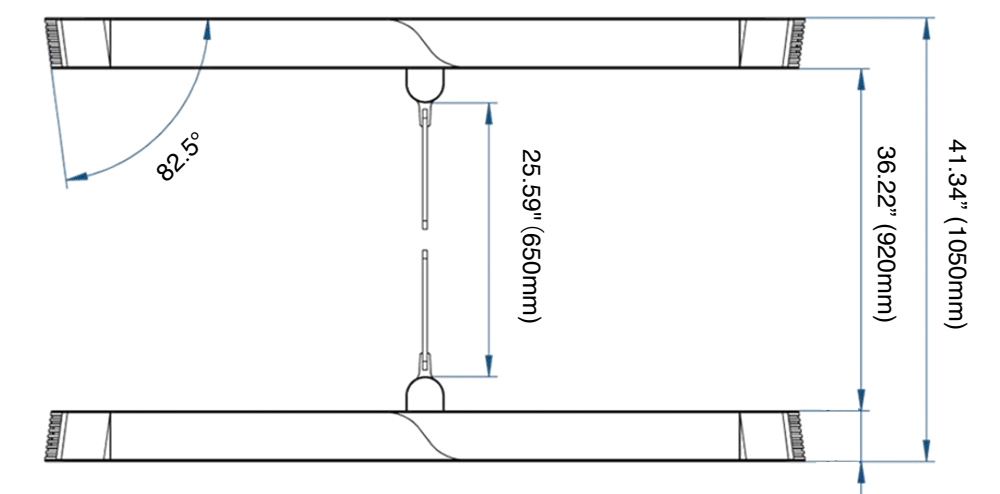
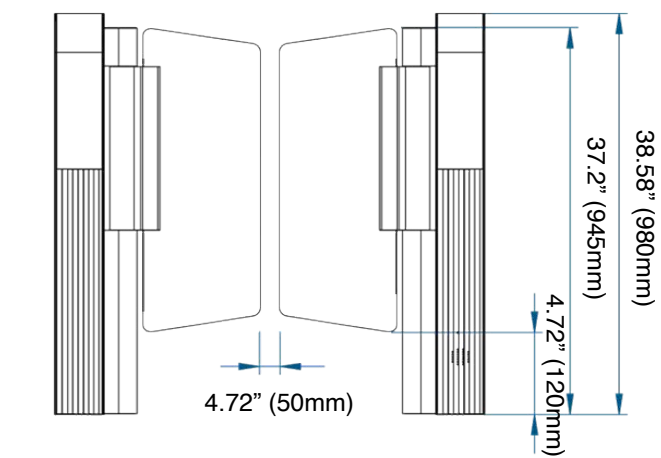
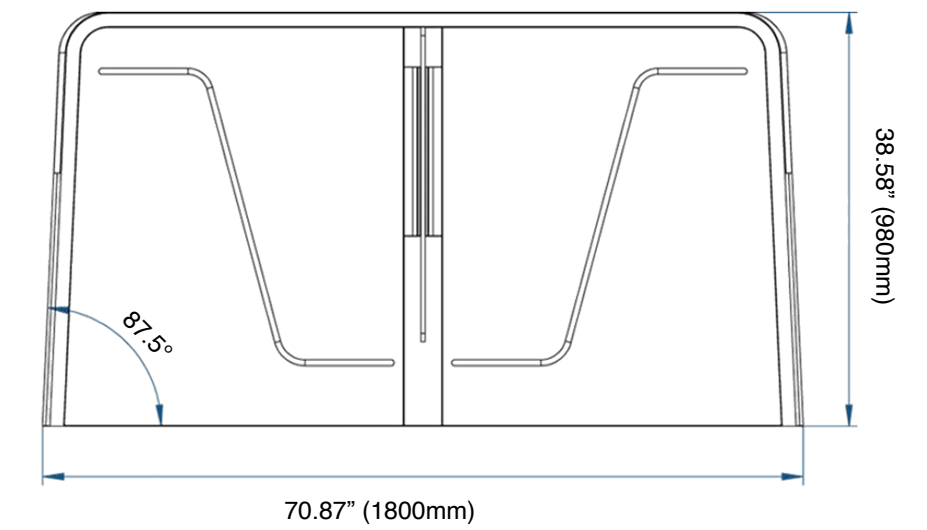
The Avalon Series has 12 pairs of sensors, which are a good fit for anti-clip, reverse, and illegal entry functions, as well as for people including those with baggage, individuals with children, wheelchair users, and families with pushchairs.

Number of Sensors	Anti-Clip	Reverse Intrusion	Illegal Entry	Person	Person with Baggage	Person with Child	Person with Stroller	Person with Wheelchair	Person with Backpack	Person with Suitcase	Person with Child	Person with Stroller	Person with Wheelchair
L1 Level (4 Pairs)	●	●	●	●	●	●	●	●	●	●	●	●	●
L2 Level (6 Pairs)	●	●	●	●	●	●	●	●	●	●	●	●	●
L3 Level (10 - 16 Pairs)	●	●	●	●	●	●	●	●	●	●	●	●	●
L4 Level (16 - 24 Pairs)	●	●	●	●	●	●	●	●	●	●	●	●	●
L5 Level (24+ Pairs)	●	●	●	●	●	●	●	●	●	●	●	●	●
L6 Level (Radar)	●	●	●	●	●	●	●	●	●	●	●	●	●

● Applicable ● Not recommended ● Not Applicable

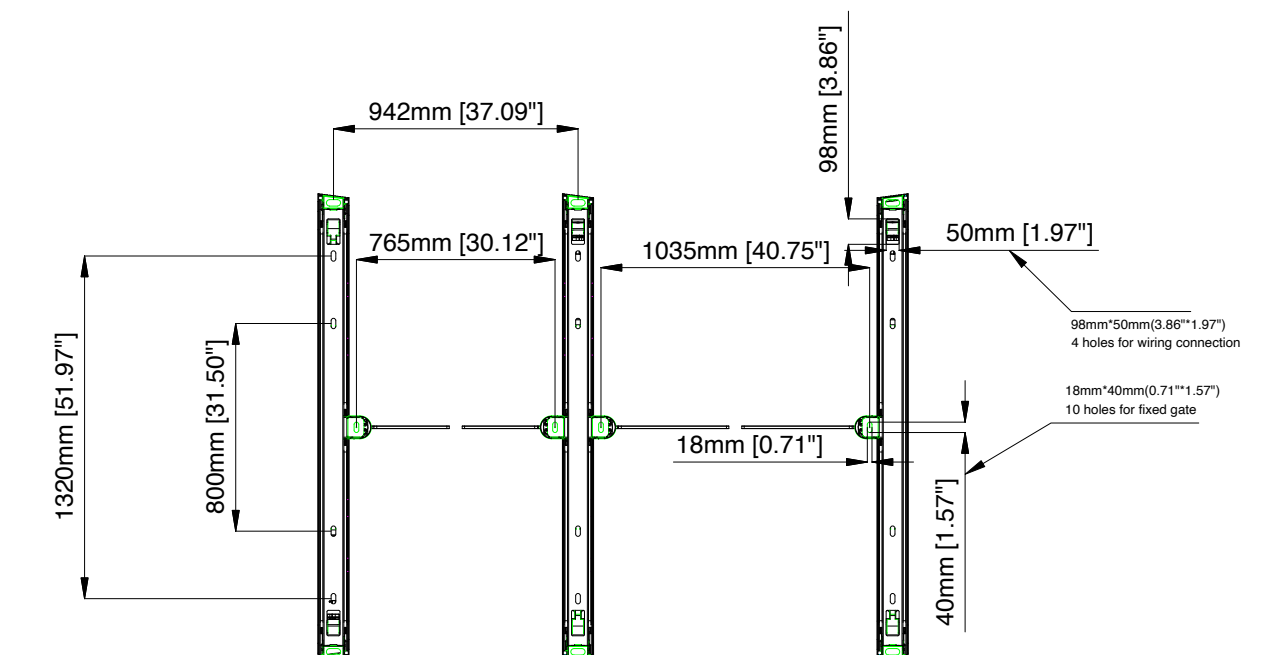
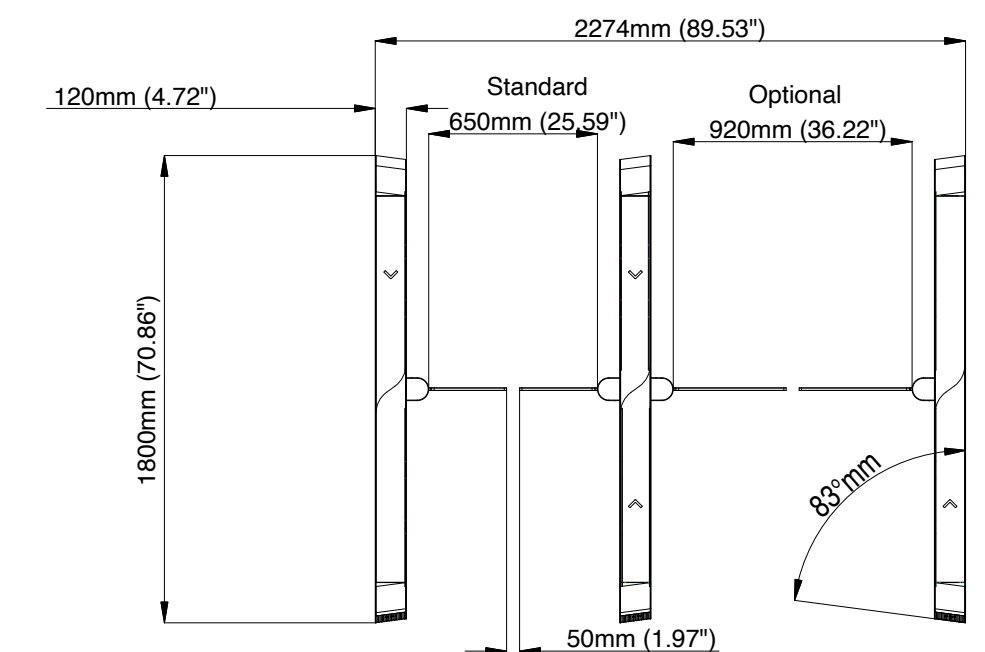
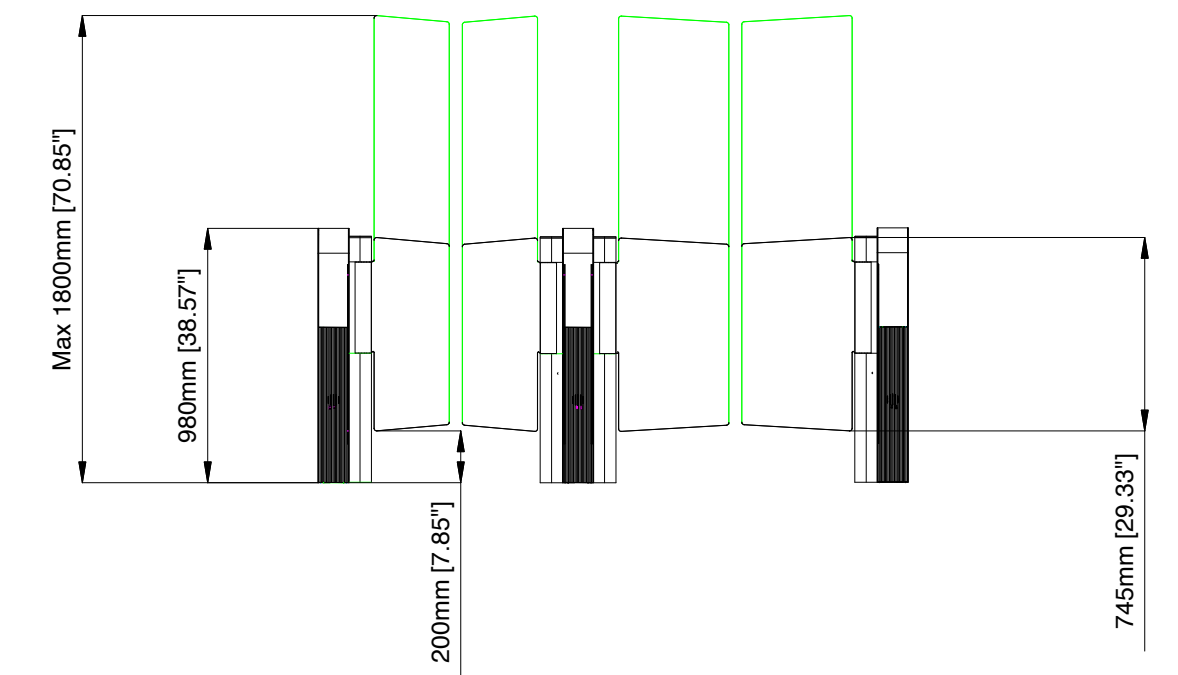
Product Dimensions (Standard)

Specifications		
Internal Number	Avalon-S1000	Avalon-S1200
Audio Indicator	Internal Buzzer	
Visual Indicator	Visual Indicators on the Lid Panel Green (Arrow): Standby Red (Cross Icon): Door Closing LED Strip Visual Indicators White (Breathing Light): Standby Green (Running Light): Door Opening Red (Flashing Light): Alarm	
Display	Optional (Available with integrated facial recognition systems)	
Lane Type	Single Lane	Dual Lane
Lane width	25.59" (650mm) (Standard), 36.22" (920mm)(Optional)(ADA Compliance)	
Barrier Movement Type	Swing	
Motor	German-made DC brushless motor	
Movement Speed	0.3-0.6 seconds per movement (open/close timing) (depends on the leaf size)	
Movement Accuracy	≤1.5 Degree per movement	
Clutch	Mechanical clutch for anti-panic/anti-collision	
Lid Material	Tempered glass (black + white) (standard)	
Lid Options	Under mount options: RFID / QR Code / Mobile Credentials/ Fingerprint / Facial recognition / Palm recognition / RFID + QR Code / Fingerprint + QR Code / RFID + QR Code + Fingerprint / Mobile Credentials Top mount option: Compatible with external facial recognition systems Side mount option: RFID / QR Code / RFID + QR Code / Mobile Credentials	
Authentication Methods		
Chassis Material	Tempered Glass and High-carbon Steel	
Chassis Colour	White (Standard), Customizable	
Door Leaf Material (H x W)	Material: Acrylic(Standard), Tempered Glass(optional) Size: 29.33" x 11.41 (745 x 290mm)(Standard), 29.33" x 16.73" (745 x 425mm) / 62.99" x 11.41" (1600*290mm)/ 62.99" x 16.73" (1600x425mm)(Optional)	
IR Sensors	12 pairs (Military-grade, matrix layout)	
Motherboard Function	System configuration, anti-pinch, anti-tailgating, pass memory, safety logic, and more	
Motherboard Communication	Fire alarm Port(Relay)*1, RS485 Port*1, RS232 Port*1 (Standard), TCP/IP (Optional)	



Product Dimensions (ADA Compliance)

Specifications		
Internal Number	Avalon-S1000	Avalon-S1200
Controller	Advanced servo controller Armatura Controller: AHDU-1260/ AHDU-1460 (Optional)	
Credential Options	Under mount RFID, QR code & Mobile Credentials reader: (support model: Armatura EP10C & Armatura EP20 Series & Armatura VG10CKQ Series) under mount fingerprint reader: Armatura EP30CF Series under mount facial recognition terminal: coming soon under mount palm recognition terminal: coming soon Side mount RFID, QR code & Mobile Credentials reader: (support model: Armatura EP10C & EP20 Series & VG10CKQ Series) (For disable people) Top mount facial recognition terminal: OmniAC20 / OmniAC30/ FT10CMQ	
Flow Rate	RFID: 30 passengers per minute QR Code: 30 passengers per minute Mobile Credentials: 30 passengers per minute Fingerprint: 20passengers per minute Face: 15 passengers per minute Plam: 15 passengers per minute Emergency: 60 passengers per minute	
Accessibility	Under mount facial recognition version: adult, children, disability Rest of the versions: adult, children (with care), disability (with care)	
Power Supply	100-240VAC, 50/60Hz	
Power Rating	40VA (Stand By); 200VA (Operation)	
Fire Signal	Input for voltage-free contact	
Noise Level	Less than 60dB	
MTTR	Less than 60 minutes	
MCBF	30 million	
Weight	882 lbs (400kg) Net Weight: 661 lbs (300kg)	551 lbs (250kg), Net Weight: 441 lbs (200kg)
Dimension (L x W x H)	70.9" x 4.7" x 38.6" (1800 x 120 x 980mm)(Standard)	
Dimensions With Packing (L x W x H)	74.8" * 12.6" * 47.2" (1900 x 320 x 1200mm) (Standard)	
Operating Temperature	-4°F to 140°F (-20°C to 60°C)	
Operating Humidity	95% RH (non-condensing)	
Certifications	CE, FCC, RoHS(coming soon), UL325(coming soon), UL2593(coming soon)	
Ingress Protection Rating	IP33 (Dustproof and Waterproof for indoor use)	
Supported Software	Armatura One	



Specifications		
Internal Number	Avalon-S1000	Avalon-S1200
Safety Features	<ul style="list-style-type: none"> Infrared Anti-Clamping Mechanical Anti-Clamping Electric Current Detection Anti-Clamping Power-Off Fail-Safe Emergency Escape Function Overforce Feedback Control Safety force sensing Lower safety sensors Accurate presence sensing Emitter/ receiver infrared sensors technology Logic voltage 24V DC Voltage free contact input for fire alarm fail state Auto opening on power off Anti-panic push opening in operation Wide walkway for wheelchair or easier access <p>Accompanied wheelchair or child passage management (under mount facial recognition & Side mount RFID & QR code reader version)</p>	

ARMATURA

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