FirstLane PLUS
Technical datasheet
Rev. 00 • Update 04/2024

AUTOMATIC SYSTEMS

FirstLane™

DESCRIPTION

1. Robust and stable RoHS zinc-plated steel frame for better corrosion resistance.

2. Front panels in brushed AISI 304L stainless steel, with optional integrated orientation light.

3. **For the low version:** Stainless steel top cover with reader screen(s), with function light(s).
   For the high version: Laminate top cover with RFID logo(s), with function light(s).

4. Housing elements in brushed AISI 304L stainless steel.

5. Obstacles in 8 mm thick painted steel, swinging in the direction of user passage with anti-corrosion treatment.

6. Electromechanical obstacle drive units, each consisting of:
   - A brushless DC electronic commutation motor and helical drive gear.
   - A controller which provides progressive accelerations and decelerations of the obstacles for a smooth movement and enhanced user safety.

7. Logic control board ensuring advanced traffic management. A built-in Web server accessible from any standard Web browser provides a simple interface for configuration of the gate's functional parameters and a complete diagnostics and maintenance tool.
   This maintenance interface is common to multiple Automatic Systems products and greatly facilitates product maintenance.

8. Data transfer with the outside world via the XML-RPC communication protocol over an Ethernet interface.

9. Data transfer by dry contacts: passage authorisation, passage data, fraud, technical defect, etc.

10. Proprietary DIRAS detection system, consisting of a high-density matrix of infrared transmitter/receiver photocell beams. It follows the users' progression through the lane and helps ensure their safety during opening/closing of the obstacles.
    The new detection algorithms offer best in class performance for detecting tailgating and other types of fraud.

11. Wide dynamic orientation light indicating lane status and providing greater visibility ensuring an optimal throughput (option).

12. Static function lighting, close to the reader integration zone, indicating user access authorisation. Also available as a dynamic option.

13. Easy integration of contactless readers 'STID ARCS-A/BT' (RFID, NFC) or 'MACE MM' (QR Code) (optional).

14. 8 mm thick clear tempered glass side panels (optional).

15. The electronic cards are varnished in order to resist ambient humidity (condensation).

The **FirstLane PLUS** double swing door security entrance lane offers a **high bidirectional throughput** and **uncompromising security**.

With its **modern and elegant design**, the FirstLane PLUS is designed to integrate perfectly with any type of **exterior** architecture. Equipped with high processing capacity and an exclusive detection system, the FirstLane PLUS guarantees accurate user tracking and prevents any unauthorized use.

The FirstLane PLUS is a modular product that can be installed as a single or a multi-lane array and can also be combined with standard lanes and wide lanes within the same array.

As an option, its new dynamic light provides for better user experience by offering a more intuitive information.

Version FirstLane PLUS - HIGH

STANDARD TECHNICAL CHARACTERISTICS (PER LANE)

Power supply	Single phase 110 VAC/ 240 VAC (5A) (+/- 10%) - 50/60 Hz + Ground. [1] (+ 5A if heating option)
Consumption	Standby with brake deactivated : 26 W* Standby with brake activated : 72 W* Operating: 60 W* Maximum: 150 W*
	* + 390 W (maximum) with heating option
Motors (x2)	24 VDC - Output power 90 W
Min. opening/closing times	0.7 seconds [2]
Number of available inputs/outputs	8 digital inputs, 6 digital outputs (+6 if dynamic lights), 3 relay outputs
Ambient operating temperature	-10°C to +50°C
Relative ambient humidity	< 95%, without condensation
MCBF (Mean Cycles Between Failures)	**5,000,000** cycles, in compliance with recommended maintenance
Sound level	50 dB to 1 m distance
Wind resistance	Max. 100 km/h
Free passageway (L)	600 or 900 mm
IP rating	IP44
CE	Complies with European standards

		FIRSTLANE PLUS - LOW	FIRSTLANE PLUS - HIGH
Weight (without obstacles)	Right Housing	101 kg	84 kg
	Intermediate Housing	116 kg	99 kg
	Left Housing	90 kg	80 kg

			NARROW OBSTACLE	WIDE OBSTACLE
AERO obstacle weight	FirstLane - LOW	**900 mm**	5.3 kg	7 kg
	FirstLane - HIGH	**1750 mm**	11 kg	14.5 kg

[1] Do not connect to an isolated ground network or a high impedance earthed industrial network.

[2] Depending on the size of the obstacles

WORKS TO BE PROVIDED BY THE CUSTOMER

- Floor mounting.
- Power supply.
- Wiring between lanes of a single array.
- Wiring to external peripheral equipment, if any.
- Integration of accessories.

Note: Follow the installation plan.

PRECAUTIONS FOR USE

For safety reasons, children must be supervised by an adult at all times when in the vicinity of the housing and when passing through the gate.

When the gate is used by a child accompanied by an adult, the child must precede the accompanying adult.

CONFIGURATIONS

AERO OBSTACLES

	FirstLane PLUS - LOW	FirstLane PLUS - HIGH
Passage width 600mm	●	●
Obstacles with a height of 900mm	●	
Obstacles with a height of 1750mm		●

● = standard configuration at no extra cost
○ = configuration available as an option at additional cost

OPTIONS

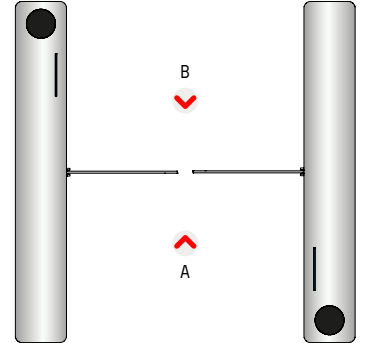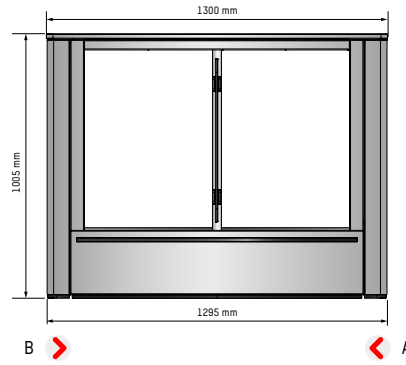|	FirstLane PLUS - LOW	FirstLane PLUS - HIGH
Supplement for wide low AERO obstacle (height 900mm) [1]	○	
Supplement for wide high AERO obstacle (height 1750mm) [1]		○
Left or right housing with brake (100 Nm)	●	●
Intermediate housing with brake (100 Nm)	●	●
Housing with brake (included) + Mechanical egress [1]	○	○
Housing with fixed lateral obstacle	○	○
Dynamic status and orientation light(s) [1]	○	○
Top cover in stainless steel with reader screen(s) in screenprinted glass, with status light(s) [2]	●	
Top cover in black laminate with RFID logo(s), with function light(s) [3]		●
Top cover "free exit" with status light(s) (Top cover in glass, laminate or stainless steel)	○	○
End housing "anti-fraud" top cover in black laminate with RFID logo(s) & reading area (24x16mm²) for QR reader, with status light(s)		○
Top cover in stainless steel sheet applied to a laminate support, with reader screen(s) in screenprinted glass, with status light(s) [2]		○
IP44 for cold climates (-10°C to +50°C) [4 and 5]	●	●
Heating for very cold climates (-30°C to +50°C)	○	○
Additional varnished AS1612 I/O board (+8 digital inputs; + 5 relay outputs)	○	○
Sound card (varnished) + 1 Speaker	○	○
Battery to open the obstacles in the event of power failure	○	○
Smart & Slim control panel	○	○
Smart Touch configurable interactive control panel	○	○

1 This option weill be charged 2x in the case of an intermediate housing, only once in other cases.
2 The number of glass screen(s) (1 or 2) will be automatically defined by the housing configuration selected (1 for left or right end housing, 2 for left or right intermediate or hybrid housing).
3 The number of RFID logo(s) engraved in the top cover (1 or 2) will be defined automatically by the configuration of the housing selected (1 if left or right end housing, 2 if left or right intermediate or hybrid housing).
4 Requires the choice of a stainless steel or laminate top cover.
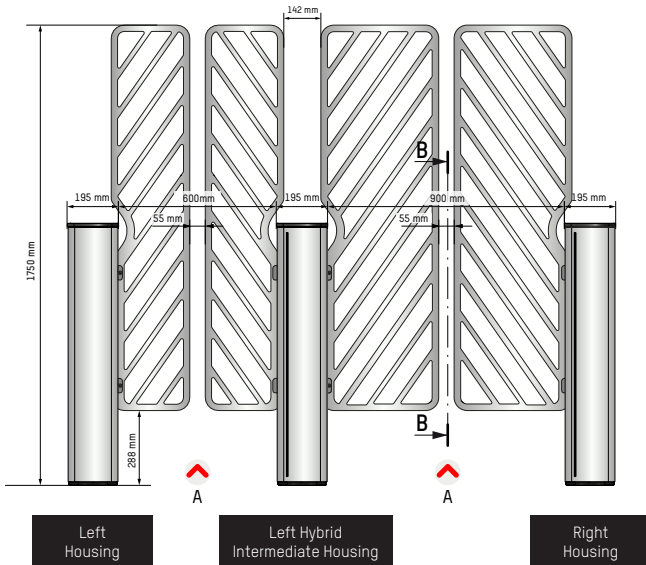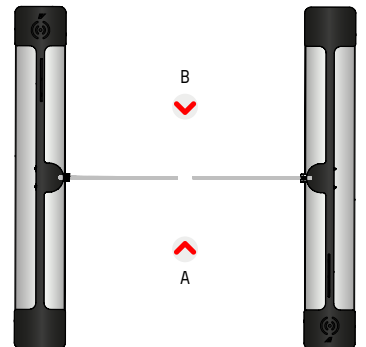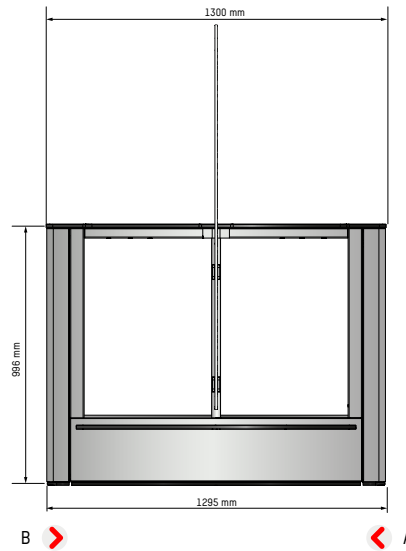5 Requires the selection of brake.

DIMENSIONS

FirstLane PLUS - LOW

SECTION B-B

| Left Housing | Left Hybrid Intermediate Housing | Right Housing |
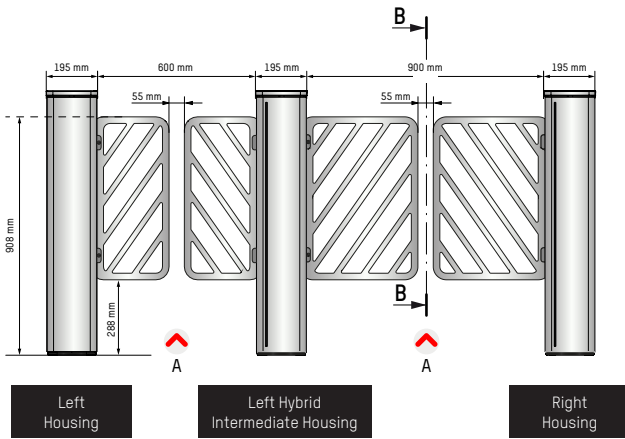
FirstLane PLUS - HIGH

SECTION B-B

| Left Housing | Left Hybrid Intermediate Housing | Right Housing |

Height with top cover in stainless steel sheet applied to a laminate support : 998 mm.

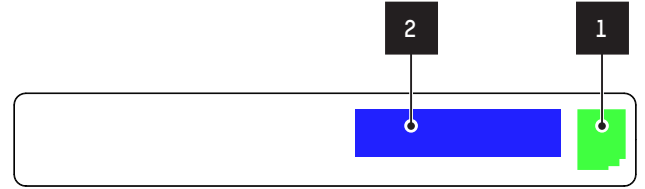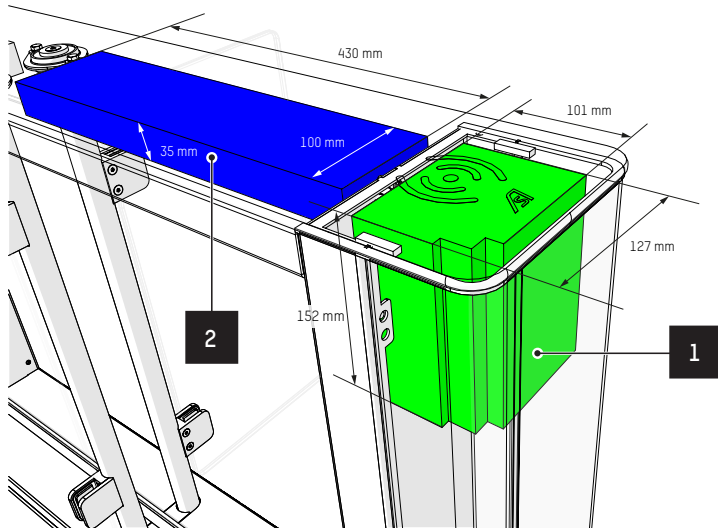# MAXIMUM VOLUMES AVAILABLE FOR READER INTEGRATION

FirstLane - LOW

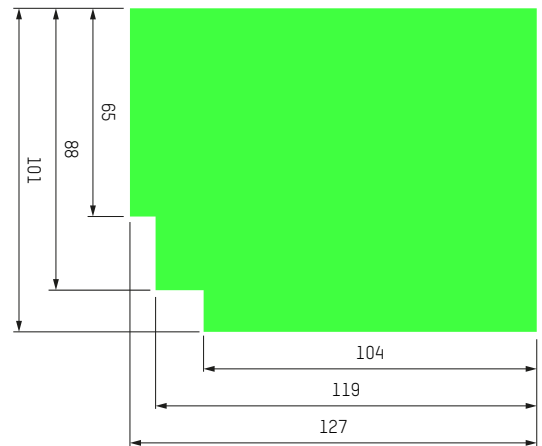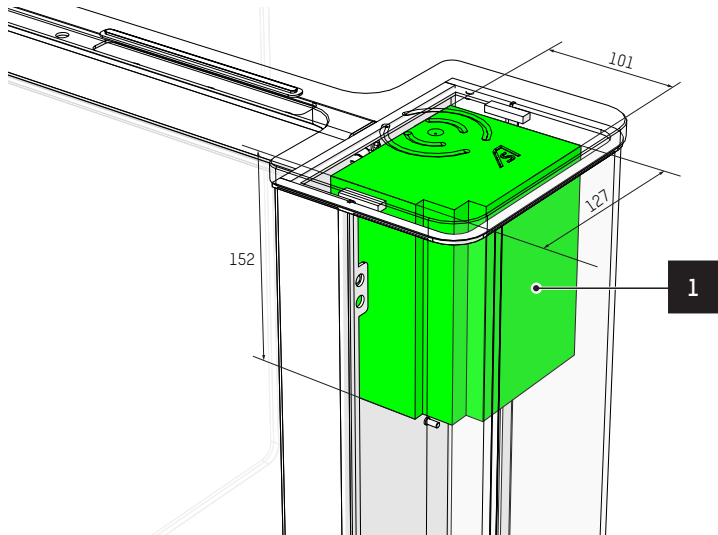| ILLUSTRATION	DESCRIPTION	DIMENSIONS L x W x H (mm)
1	Volume under top cover / top of front panel	101 x 127 x 152
2	Volume under top cover / top rail* *only for non-standard housings	430 x 100 x 35

FirstLane - HIGH

ILLUSTRATION	DESCRIPTION	DIMENSIONS L x W x H (mm)
1	Volume under top cover / top of front panel	101 x 127 x 152