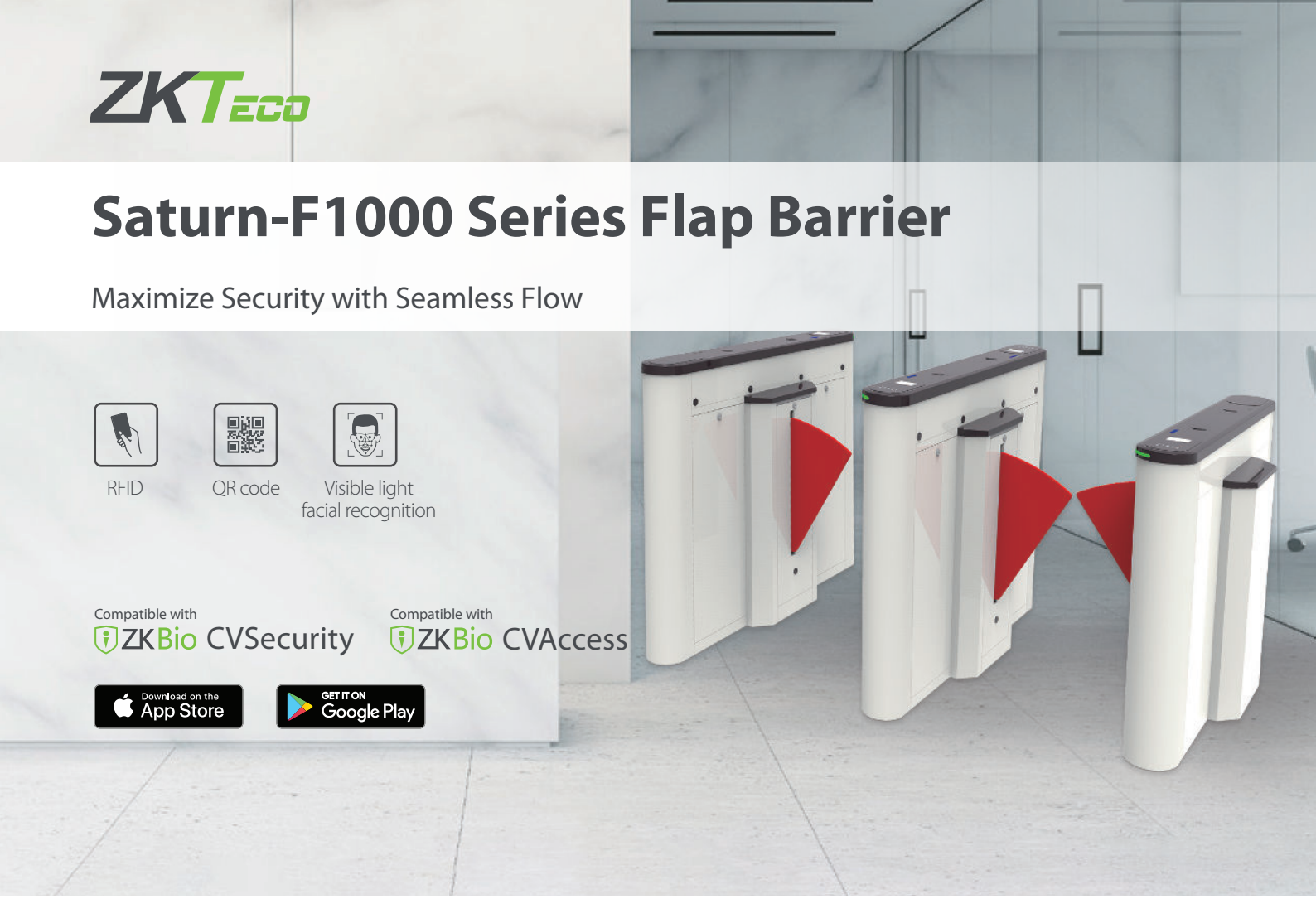
Saturn-F1000 Series Flap Barrier

Maximize Security with Seamless Flow



RFID

QR code

Visible light facial recognition

Compatible with ZKBio CVSecurity

Compatible with ZKBio CVAccess

Download on the App Store

GET IT ON Google Play

Introduction

ZKTeco's Saturn-F1000 series flap barrier is a high-efficiency and designed for efficient access control for both indoor and outdoor scenarios.

Constructed with a robust cold-rolled SPCC steel chassis and a retractable polycarbonate (PC) flap barrier, the Saturn-F1000 ensures durability and safety while maintaining a modern appearance. Equipped with a DC brushless motor, the Saturn-F1000 delivers rapid operation, opening or closing in less than one second per movement. The system integrates advanced features such as anti-pinch and anti-tailgating detection, as well as multiple authentication options—including RFID, QR code, and facial recognition—catering to diverse security requirements. Also, the Saturn-F1000 supports a flow rate of up to 30 passengers per minute (RFID/QR code) and 15 passengers per minute (facial recognition), making it ideal for high-traffic applications.

Product Highlights

Rapid Operation:
The flap barrier opens and closes swiftly in just 0.6 seconds, supporting a throughput of a maximum of 30 persons per minute in normal mode. This rapid performance makes it ideal for high-traffic areas such as metro stations and commercial complexes.

Durable and Stable:
Driven by a brushless DC motor, the flap barrier operates stably and long lasting. Its mean cycle between failure (MCBF) recorded 5 million times.



Infrared Detection:
It is standardly equipped with 5 pairs of infrared detectors, supporting anti-pinch, anti-tailgating, and wrong way entry detection.

Biometric Integration:
Facial Authentication (pole mount)
RFID Verification
QR code scanning (static and dynamic)

Key Features

Fast Passage Experience

The Saturn-F1000 flap barrier turnstile enables rapid opening and closing typically in less than one second. It provides efficient throughout up to 30 people per minute using biometric authentication. This high-speed performance is ideal for busy environments like airports, metro stations, and stadiums, minimizing wait times and streamlining pedestrian flow during peak periods.

High-Security Assurance

Advanced infrared sensing and five sensor pairs provide precise detection, effectively preventing tailgating and unauthorized entry.

Exceptional Stability Performance

A robust internal structure and high-quality materials, combined with a durable DC brushless motor rated for 5 million cycles, ensure reliable, low-maintenance operation in high-traffic environments.

Flexible Customization

The flap barrier can be diversely customized to meet the needs of different venues and readers. It can integrate with IC/ID card readers, QR code readers and facial recognition devices to satisfy diverse authentication requirements.

Configurable Passage Options

Offers configurable passage modes: such as one-way, two-way, or free passage, to suit various access control scenarios.

Durable Material with IPX4 Protection Rating

Built with powder-coated cold-rolled steel for corrosion resistance and it reached IPX4 protection rating for enhanced water proof and dust resistant.

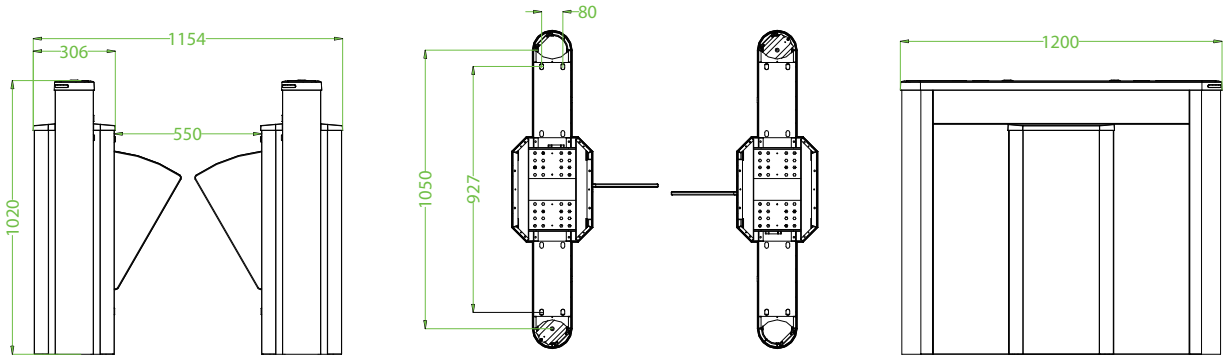
Specifications

Model	Saturn-F1000	Saturn-F1200
Audio Indicator	Speaker	
Visual Indicator	LED Indicators Steady blue = Standby, Steady green = Normal use Steady red = Barrier close	
Display	N/A	
Lane Type	Single Lane	Dual flap barriers for additional lane (with Saturn-F1000)
Lane width	550mm	
Lane Height	1020mm	
Barrier Movement Type	Retractable flap barrier (Polycarbonate)	
Motor	DC brushless motor	
Movement Speed	Less than 1s per movement (open/close timing)	
Movement Accuracy	N/A	
Clutch	N/A	
Cabinet Lid Material	Cold-rolled SPCC Steel (GB700)	
Lid Material	Polycarbonate+2.5D tempered glass	
IR Sensors	5 pairs	
Motherboard Function	System configuration, access mode configuration, anti-pinch configuration, anti-tailgate configuration etc.	
Motherboard Communication	Fire alarm Port(Relay)*1, RS485 Port*1,	
Lid Options Authentication Methods	Streamlined under mount options: RFID / QR Code Top mount options with mounting pole: Facial Recognition (compatible with ProFace X / SpeedFace V5L / Elite Pass)	

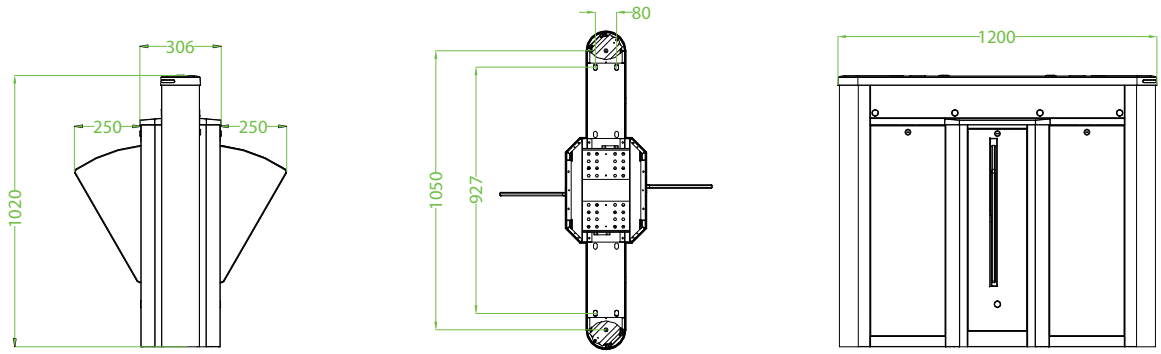
Chassis Material	Cold-rolled SPCC Steel (GB700)	
Chassis Colour	White	
Controller	C3, InBio series or or third-party devices	
Credential Options	Under mount RFID reader: (support model: ProID Series) Under mount QR Code Reader: QR500 Top mount facial recogntion terminal: ProFaceX/ Elite Pass/ SpeedFace V5L	
Flow Rate	RFID: 30 passengers per minute QR Code: 30 passengers per minute Facial Recognition: 15 passengers per minute	
Accessibility	Standard lane (550mm): Adult and children	
Power Supply	110V / 220VAC @ 50-60 Hz	
Power Rating	10VA (Standby), 40VA (Operation)	
Fire Signal	Input for voltage free contact	
Noise Level	Less than 60dB	
MTTR	Less than 60minutes	
MCBF	5 million	
Weight	Gross weight (60kg) Net weight (50kg)	Gross weight (35kg) Net weight (30kg)
Dimensions (L*W*H)	1200*306*1020mm	
Dimensions With Packing (L*W*H)	1345*360*1100mm	
Operating Temperature	-20°C to 70°C	
Operating Humidity	20% to 85% RH (non-condensing)	
Certifications	CE, FCC	
Ingress Protection Rating	IPX4	
Supported Software	ZKBio CVAccess / ZKBio CVSecurity (Depends on equipped access controller)	
Safety Features	IR sensor safety detection Logic voltage 24V DC Voltage free contact input for fire alarm fail state Auto opening on power off	
Security Features	Anti-intrusion, anti-tailgating, wrong way enter alarm, automatically close door when no one pass	
Product Delivery	Pre-assembled	
Application Environment	Indoor/ Outdoor	
Site Preparation	Flat & level finished floor (base plate in options for unfinished floor)	

Security Level	Middle
Emergency Mode	Support (door unlock automatically)
Packing Material	Carton box

Dimensions (mm)



Saturn-F1000



Saturn-F1200

Application Scenarios



School



Museum



Factory



Gym

ZKTECO CO.,LTD. www.zkteco.com E-mail: sales@zkteco.com

Copyright © 2025 ZKTECO CO., LTD. All rights reserved.