

Saturn-S4000 Series

**Aesthetic Biometric Swing Barrier
With Smart Vertical Dual Display**



ZKBio CVSecurity **ZKBio CVAccess**



Introduction

ZKTeco's Saturn-S4000 series redefines entrance control, fusing elegant industrial design with intelligent security via advanced dToF sensors and multi-modal biometric authentication.

Saturn-S4000 series is driven by DC brushless motors, delivering smooth and quiet swing barrier operation in just 0.3 to 0.6 seconds per movement. At its core, the 12 pieces dToF sensors enhances detection accuracy, providing robust anti-tailgating and anti-pinch protection.

Available in single-lane (S4000) and dual-lane (S4200) configurations, the series offers a standard lane width of 650mm and an optional 1,000mm wide lane width configuration to accommodate wheelchair users and trolleys for enhanced accessibility.

What makes the Saturn-S4000 series stands out is its versatile multi-modal biometrics authentication. User can choose under-mount RFID and fingerprint readers that preserve the tempered glass lid, or add contactless

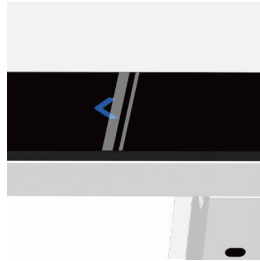
QR code verification for visitor and temporary access. When facial and palm authentication is required, simply mount the ZKTeco's Zophon facial recognition module on the motor post—no hardware replacement needed.

Additionally, the Saturn-S4000 series maximizes business value with its integrated 23.9-inch vertical dual LCD display. This full-color screen delivers promotional and branding content through vivid video and photo slideshow playback, all managed remotely via Wi-Fi using the ZKDigimax Screen Direct.

Key Features

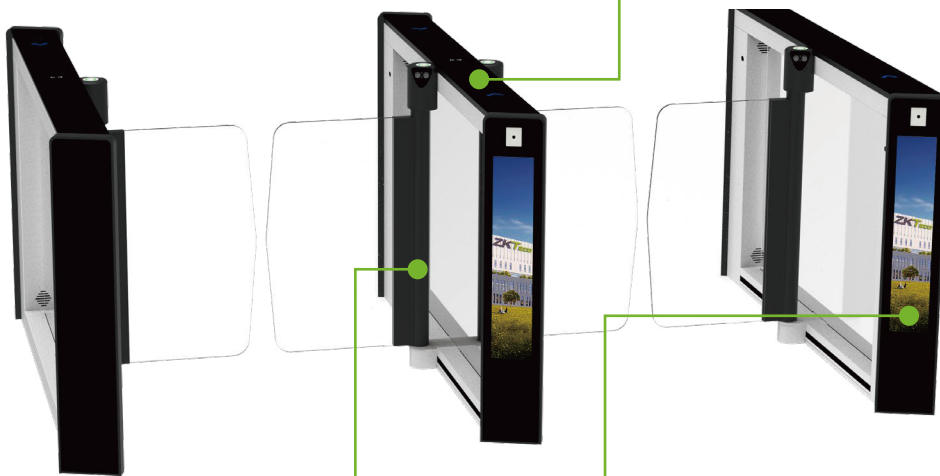
Aesthetic and Reliability

The top cover is covered with a single piece of black tempered glass. This design resists daily wear while maintaining long-term operational stability.



User Experience

Tri-color LED indicators give clear status at a glance: blue for standby, green for entry, and red for barrier closing or alarm, ensuring smooth and intuitive passage.



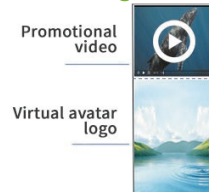
Compact Core Drive

A 60mm-diameter core drive module frees up internal space, enabling tighter cabinet dimensions and slimmer gate profiles.



Front and Rear LCD Displays

The turnstile is equipped with dual LCD displays—one on the front and one on the rear. A 23.9-inch vertical color LCD display seamlessly embedded in the Saturn-S4000 gate column transforms the lane into a dynamic digital media platform.



Function



Multi-Modal Biometric Compatibility

It accommodates RFID, fingerprint, QR code, Palm and facial authentication through flexible reader mounting. Undermount readers preserve the glass-lid aesthetic, while the Zophon facial recognition module attaches to the motor post without hardware replacement.

High-Speed Door Opening / Closing Response

The door opening and closing speed is highly responsive, with a minimum door operation time of 0.3 seconds. It can efficiently handle pedestrian flow during peak hours, easily meeting the needs of high-traffic scenarios such as commercial buildings and transportation hubs.

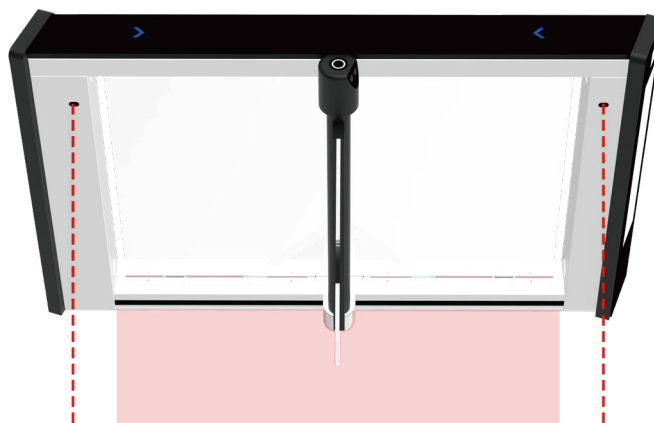


Wide Lane Width Adaptability

The standard lane width of 650mm can be expanded to 1,000mm upon request to accommodate wheelchairs, trolleys, and oversized luggages for enhanced accessibility.

Multiple Anti-Pinch Protection Mechanisms

Integrates three anti-pinch technologies—current detection, mechanical limit stops, and an array of dToF sensors that monitor the presence of people and objects in the passage in real time, helping reduce pinch risk and enhance user safety.

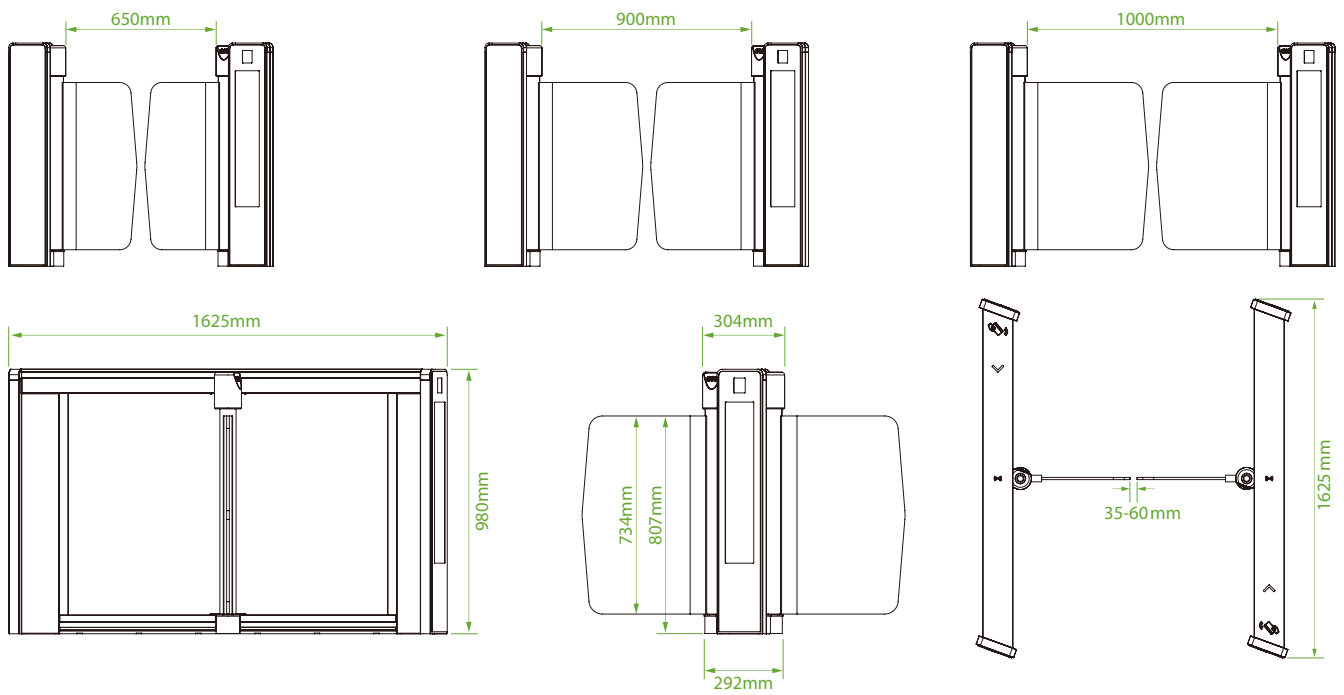


Specifications

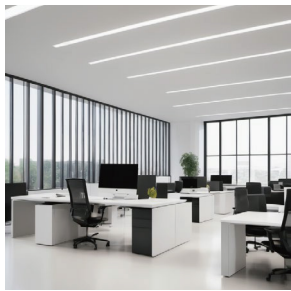
Model	Saturn-S4000	Saturn-S4200
Audio Indicator	Internal speaker	
Visual Indicator	Top LED indicator: Blue=Door closed / stand by Green=Door opening Red=Door closing / alarm	
Display	23.9" LCD vertical non-touch dual display (1920x360) Support file formats: jpg, jpeg, png, mp4; max.file size: 1GB (Max. no. of uploads: 6 via ZKDigimax Screen Direct) Support video and photo slideshow playback	
Lane Type	Single lane	Dual Swing (additional lane)
Lane Width	650mm (Standard) 1000mm (Optional)	
Barrier Movement Type	Swing	
Motor	DC brushless motor	
Movement Speed	0.3 to 0.6s per movement (Adjustable open / close timing)	
Movement Accuracy	N/A	
Clutch	N/A	
Lid Material	Tempered glass	
Lid Options	Streamlined under mount: QR Code / RFID / Fingerprint	
Authentication Methods	Motor mount: palm, facial authentication	

Chassis Material	Cold-rolled SPCC Steel (GB700)	
Chassis Colour	Black & Matte White	
Door Leaf Material (H*W)	Acrylic (734*300mm) ; (optional: 1734*438 mm)	
Sensors	12 pcs of dToF sensors (standard) ; 20 pcs of dToF sensors (optional)	
Motherboard Function	Supports four passage modes: Verified Passage (requires identity verification before entry), Free Passage (no verification required for direct entry), Forbidden Passage (channel locked), Constantly Open Passage (channel remains open continuously).	
Motherboard Communication	Fire alarm port (relay)*1, RS485 port*1	
Controller	N/A (Compatibility with C3-200 Plus / InBio260 Pro Plus series controller available upon request)	
Credential Options	Under mount RFID reader: ProID Series, KR Series Under mount fingerprint reader: FR1200 / FR1500S Under mount QR code reader: QR 500 Motor mount palm and facial recognition module: Zophon-S1000 facial recognition module	
Flow Rate	Facial Authentication: 30 passengers per minute QR Code: 30 passengers per minute RFID: 35 passengers per minute Fingerprint: 25 passengers per minute Palm: 25 passengers per minute	
Accessibility	Adult, children (with care), Disability (with care)	
Power Supply	110V / 220V ± 10 % AC @50Hz / 60Hz	
Power Rating	40VA (Standby) 120VA (Operation)	
Fire Signal	Input for voltage free contact	
Noise Level	Less than 60dB	
MTTR	Less than 60 minutes	
MCBF	10 million	
Weight	220kg	130kg
Dimension (L*W*H)	1625*183 *980 mm	
Dimension With Packing (L*W*H)	1770*370*1125mm (2 boxes)	1770*370*1125mm (1 box)
Operating Temperature	-10 °C to 70 °C	
Operating Humidity	5% to 90% RH (Non-condensing)	
Certifications	CE, FCC	
Ingress Protection Rating	N/A	
Supported Software	ZKDigimax Screen Direct/ZKBio CVAccess / ZKBio CVSecurity (Depends on equipped access controller)	
Safety Features	Voltage free contact, input for fire alarm, fail-safe state, automatic swing barrier open during power off	
Security Features	Anti-tailgating, anti-pinch	
Product Delivery	Pre-assembled	
Application Environment	Indoor	
Site Preparation	Flat & level finished floor (base plate for unfinished floor)	
Security Level	Middle	
Emergency Mode	Support swing barrier open automatically	

Dimensions(mm)



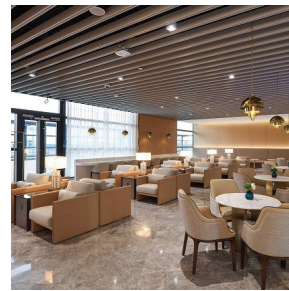
Application Scenarios



Office lobby



Enterprise building



Airport lounge



Healthcare center

