



Saturn-S1000 Pro | Smart Swing Barrier

Secure and Quiet Performance



Compatible with

ZKBio CVSecurity

Compatible with

ZKBio CVAccess



Pearl White(PWH)



Space Gray(SGY)



Carbon Black(CBK)



Bay Blue(BBLE)



Mist Brown(MBW)

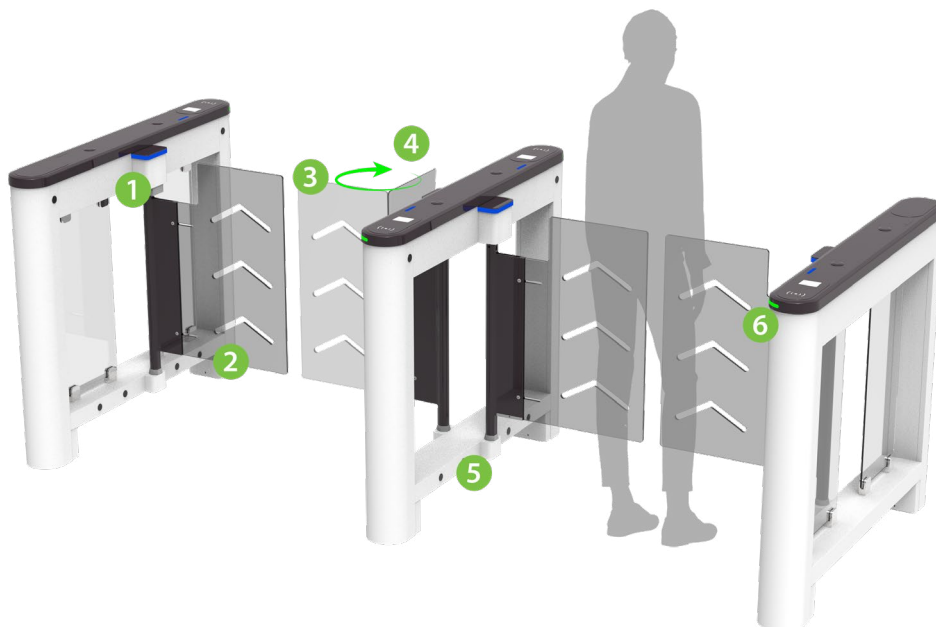
Introduction

The Saturn-S1000 Pro Series intelligent swing barrier by ZKTeco is engineered for efficient and secure pedestrian access management. Integrating mechanical structure, electronics, microprocessor control, and multiple authentication technologies into one unified system, it seamlessly coordinates authentication, directional indication, and real-time alarm systems - all driven by a high-performance DC brushless motor.

The overall design is elegant, durable, rust-resistant, and built for long-term operation. Standard electrical interfaces allow easy integration with multiple verification methods, including facial authentication, RFID, and QR code verification, providing users with a secure, orderly, and efficient passage experience while effectively preventing unauthorized access.

In a fire emergency or upon power failure, the barrier automatically releases and holds the lane unobstructed, supporting fast and safe evacuation.

Features



1.Brushless Motor Drive

Powered by a high-performance DC brushless motor, the system delivers smooth and stable operation with noise levels below 50 dB, ensuring quiet performance and long-term reliability.

2.Mechanical Anti-Pinch Protection

The barrier features mechanical anti-pinch protection. When resistance is detected during barrier reset, the motor automatically stops to prevent injuries and ensure safe passage.

3.Anti-Impact Protection

The barrier wings remain locked against external impacts of up to 120 N·m when no access signal is received, effectively preventing unauthorized intrusion.

4. Optimized 88° Opening Angle

The swing barrier's opening angle is set at 88° instead of the conventional 90° or wider. This deliberate engineering decision balances passage efficiency with algorithm-driven control, ensuring smoother and more consistent barrier movement.

5.Infrared Sensor Passage Monitoring and Intrusion Detection

The system is equipped with six pairs of infrared sensors and advanced anti-tailgating technology, ensuring only authorized users gain passage. Any attempt at tailgating or reverse intrusion triggers an immediate audible and visual alarm. The sensors maintain stable performance reliable detection in any lighting or weather—no recalibration or manual adjustment required.

Automatic Anti-Pinch Protection

Infrared anti-pinch protection enhances user safety by automatically stopping the motor when infrared obstruction is detected during barrier closing.

6.Customizable Indicator Lighting

Indicator light brightness and colors can be customized to match customer branding and blend seamlessly with the installation environment.

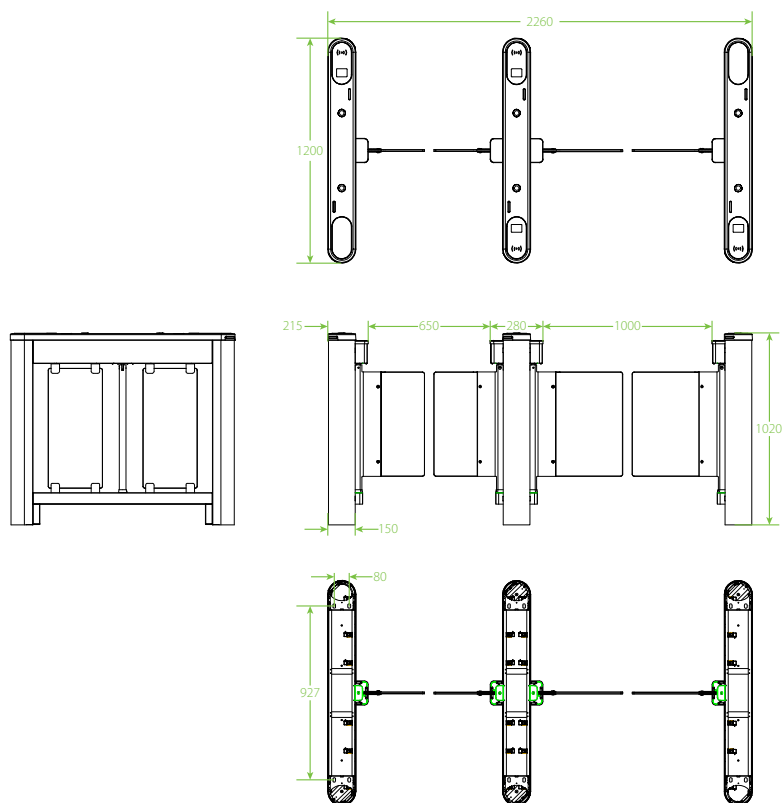
Specifications

Model	Saturn-S1000 Pro		Saturn-S1200 Pro
Audio Indicator	Internal speaker		
Visual Indicator	Top LED indicator: Blue = Door closed / stand by Green = Door opening Red = Door closing / alarm Swing Barrier LED Indicator Green = Lane available Red = Lane unavailable		
Display	N/A		
Lane Type	Single Lane	Dual wings (with Saturn-S1200 Pro)	
Lane width	650mm (Standard ; acrylic barrier) 1000mm (Optional ; acrylic barrier) 1200mm (Optional ; SUS304 barrier)		
Barrier Movement Type	Swing		
Motor	DC brushless motor		
Movement Speed	Average 1s per movement (Adjustable open/close timing)		
Movement Accuracy	N/A		
Clutch	N/A		
Lid Material	Polycarbonate+2.5D tempered glass		
Lid Options Authentication Methods	Streamlined under mount options: QR Code / RFID Surface mount option: Facial Authentication		
Chassis Material	Cold-rolled SPCC Steel (GB700) / Polycarbonate (Side Lid)		
Chassis Colour	Pearl White(PWH), Space Gray(SGY), Carbon Black(CBK), Bay Blue(BBLE), Mist Brown(MBW)		

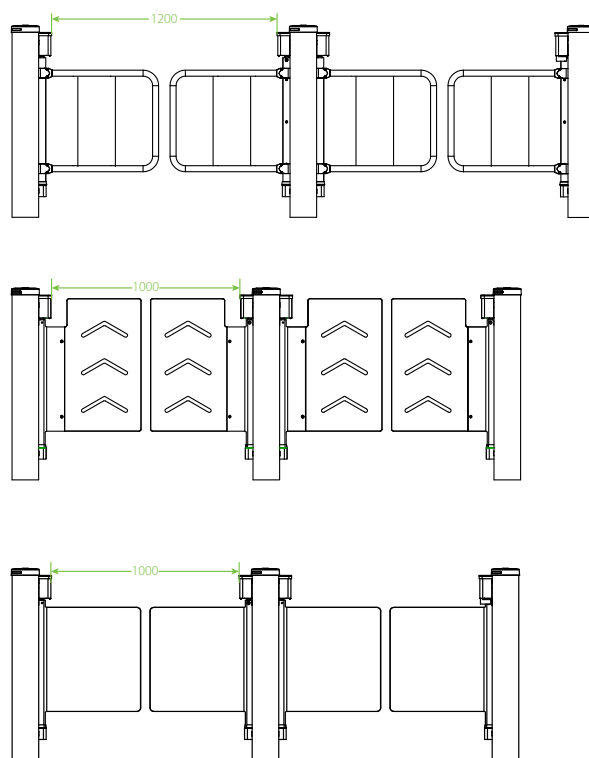
Barrier Material (H*W)	Clear acrylic (635*300mm)(standard) / Tempered glass (635*425mm)(optional) (For extended lane width of 1200mm requires SUS304 barrier)	
IR Sensors	6 pairs (standard) ; 8 pairs (optional)	
Motherboard Function	System configuration, access control	
Motherboard Communication	Fire alarm Port(Relay)*1, RS485 Port*1,	
Controller	Not equipped. Compatible with C3 series controller/ InBio series controller (optional)	
Credential Options	Under mount RFID reader: Pro ID Series, KR Series Under mount QR code reader: QR500 Surface mount facial authentication reader: ProFace X / SpeedFace V5L	
Flow Rate	Facial Authentication: 15 passengers per minute QR Code: 30 passengers per minute RFID: 35 passengers per minute	
Accessibility	Adult, Children (with care), Disability (with care)	
Power Supply	110V / 220V AC @ 50 ~ 60Hz	
Power Rating	10VA(Standby) 40VA(Operation)	
Fire Signal	Input for voltage free contact	
Noise Level	Less than 50 dB	
MTTR	Less than 60minutes	
MCBF	5 million	
Weight	Net weight (50kg)	Net weight (30kg)
Dimension (L*W*H)	1200*150*1020mm	
Dimensions With Packing (L*W*H)	Carton (standard): 1265*220*1070 mm (2 boxes) Wooden box (optional): 1300*480*1224mm (2 box)	Carton (standard): 1265*220*1070mm (1 box) Wooden box (optional): 1300*260*1224mm (1 box)
Operating Temperature	-30 °C to 70 °C	
Operating Humidity	5% to 90% RH (Non-condensing)	
Certifications	CE, FCC (pending)	
Ingress Protection Rating	IPX4	
Supported Software	ZKBio CVAccess / ZKBio CVSecurity (depends on equipped access controller)	
Safety Features	Power off unlock device/ Fire alarm active door release	
Security Features	Anti-tailgating, anti-pinch	
Product Delivery	Pre-assembled for easy installation	
Application Environment	Indoor/outdoor (if sheltered)	
Site Preparation	Flat and level finished floor (optional base plate for unfinished floors)	
Security Level	Middle	
Emergency Mode	Swing barrier unlocks automatically	
Packing Material	Wooden Box	
Warranty	1 year	

Dimensions

Standard



Optional



Applications Scenarios



Corporate Premise



Conference Venue



Hotel



Transport Terminal

