

ZKT_{ECO}

SmartAC1 Series

Multi-biometrics Verification Terminal
with Mask Detection Technology



Fingerprint
Recognition



Facial
Recognition



Palm
Recognition



QR Code



Masked Face

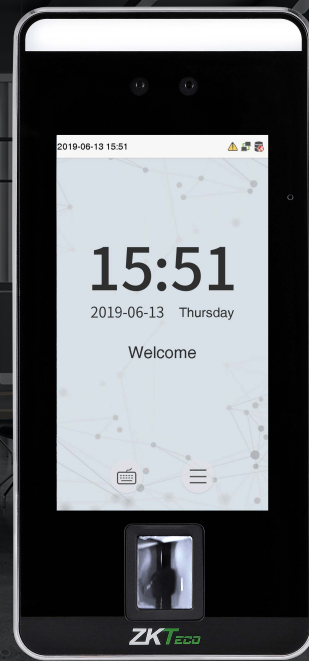
Compatible with

ZK Bio CVAccess

Compatible with

ZK Bio Zlink

ZK Bio CVSecurity



SmartAC1

SmartAC1 Series employs intelligent engineering facial recognition algorithms and cutting-edge computer vision technology. It offers support for fingerprint, facial, and palm verification with large capacity and speedy recognition. Moreover, the SmartAC1 is equipped with QR code support via Mobile APP, further enhancing the device's security performance in all aspects.

SmartAC1 Series uses touchless recognition technology and can identify individuals even when wearing masks, making it a hygienic option. Additionally, it has an advanced anti-spoofing algorithm that can detect fake photos and videos. It also features 3-in-1 palm recognition, which can identify Palm Shape, Palm Print, and Palm Vein in just 0.35 seconds per hand. The palm data is then compared to a maximum of 3,000 palm templates. The facial camera also supports QR codes, Data Matrix, MicroAztec, and other formats, and the ZKBioAccess Mobile Page supports Dynamic QR codes for T&A/A&C.

SmartAC1 Series supports video intercom via the mobile app ZSmart and PC software ZKBio CVAccess, ZKBio CVSecurity. Also, they are integrated with ONVIF Video protocol to connect to ONVIF NVR for Video surveillance and recording. Moreover, it is compatible with ZKBio Zlink Mobile APP & ZKBio Zlink-Web when switching to BEST protocol. It also supports SIP Protocol connection to the indoor unit.

* NOTE: Palm recognition function is customized for customers.

Features

- Visible Light Facial Recognition.
- Fingerprint and Palm (Customized) Recognition.
- Specific for dynamic QR code: QR code, PDF417, Data Matrix, MicroPDF417 and Aztec.
- Compatible with ZKBioAccess Mobile Page for access control management
- Supports two-way talk and video intercom via ZKBioTalk and ZSmart App through mobile devices.
- ONVIF Protocol.
- Better hygiene with touchless biometric authentication and masked individual identification.
- Anti-spoofing algorithm against print attack (laser, color and B/W photos), videos attack and 3D mask attack.
- Available card modules: 125kHz ID card / 13.56MHz IC card.
- Supplement light with adjustable brightness.
- Multiple Verification Methods: Fingerprint / Face / Palm (Customized) / QR Code / Card / Password.

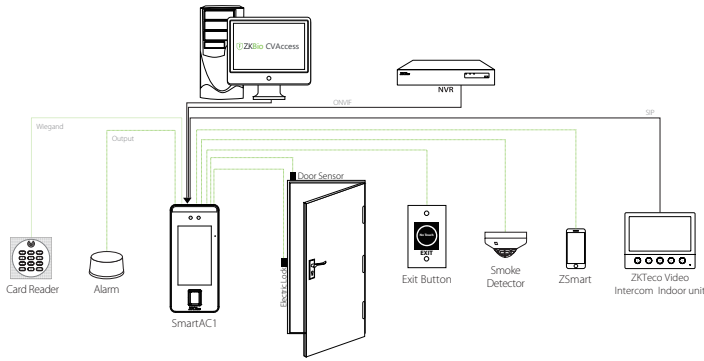
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Specifications

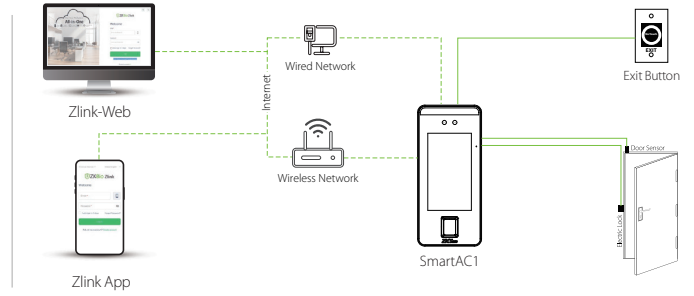
Model	SmartAC1
Display	5"@ ISP Color LCD Screen (720*1280)
Camera	WDR Low Light Camera @ 2MP
Operation System	Linux
Hardware	CPU: 1.GHz Dual Core RAM: 1GB; ROM: 8GB Supplement Light: Yes Virtual Keypad: 12 Keys Fingerprint Sensor: Z-ID
Authentication Method	Face / Fingerprint / Palm (Customized) / Card / Password (Virtual Keypad)
Fingerprint Template Capacity	6,000 (1:N) (Standard) / 10,000 (1:N) (Optional) 6,000 (1:1)
Face Template Capacity	6,000 (1:N) (Standard) / 10,000 (1:N) (Optional) 6,000 (1:1)
Palm Template Capacity (Customized)	3,000 (1:N) (Standard) 3,000 (1:1)
Card Capacity	10,000 (1:N) 10,000 (1:1)
Transaction Capacity	200,000 (1:N) (Optional for Capacity Expansion)
Biometric Verification Speed	less than 0.3 sec (Fingerprint) less than 1 sec (Facial Recognition) less than 0.35 Sec (Palm)
Touchless Biometric Recognition Distance	1cm to 100cm (Facial Recognition) Up to 50cm(Palm)
False Acceptance Rate (FAR) %	FAR ≤ 0.01% (Visible Light Facial Recognition) FAR ≤ 0.0001% (Fingerprint ; ZKFingerprint V10.0) FAR ≤ 0.05% (ZKPalm V12.0)
False Rejection Rate (FRR) %	FRR ≤ 0.02% (Visible Light Facial Recognition) FRR ≤ 0.01% (Fingerprint : ZKFingerprint V10.0) FRR ≤ 1.8% (ZKPalm V12.0)
Biometric Algorithm	ZKFace 3.5 ZKPalm V12.0 (Customized) ZKFingerprint V10.0
Card Type	ID Card@125 kHz IC Card@13.56 MHz (Optional) CEPAS(Optional)
QR Code	Dynamic or Static QR codes on the ZKBio CVSecurity mobile application. QR code, PDF417, Data Matrix, MicroPDF417 and Aztec scanning in third-party development projects(Support QR500/600 Series).
Communication	TCP/IP*1 Wiegand (Input & Output)*1 RS485: ZKTeco RS485*1* Aux Inputs *1, Aux Outputs *1, Electric Lock*1, Door Sensor*1, Exit Button*1, Alarm*1, Doorbell*1,
Standard Functions	ADMS, T9 Input, DST, 14-digit User ID, Access Levels, Groups, Holidays, Anti-passback, Record Query, Tamper Switch Alarm, Multiple Verification Methods
Power Supply	DC 12V 3A
Operating Temperature	-10°C to 45°C (14°F to 113°F)
Operating Humidity	10% to 90% RH (Non-condensing)
Dimensions	91.93mm * 202.93mm * 21.5mm (L*W*H)
Gross Weight	1.3 Kg
Net Weight	0.6 Kg
Supported Software	Software: ZKBio CVAccess / ZKBio CVSecurity Mobile App: ZKBio Zlink / ZSmart (Optional) Cloud Service: ZKBio Zlink
Installation	Wall-mount (Compatible with Asian Gang-box / Single Gang-Box)
Certifications	ISO14001, ISO9001, CE, FCC

* Note: RS485 is for RS485 readers.

Configuration

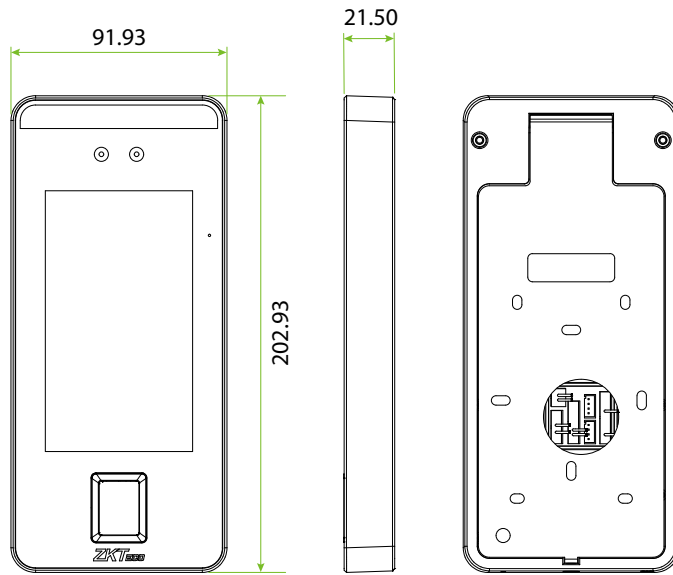


PUSH Protocol



BEST Protocol

Dimensions (mm)



SmartAC1

Supported NVR Models

Z8504NER, Z8508NER, Z8516NFR

PoE Version: Z8504NEQ-4P, Z8508NEQ-8P, Z8516NFR-16P, Z8532NFR-16P

Mobile APP: ZSmart(PUSH Protocol), ZKBio Zlink(BEST Protocol)

