

ProFace X(DS)

Advanced Accuracy Facial Recognition Terminal powered by Dual Spectrum Facial Recognition Technology















conditions to100,000 lux)











ProFace X(DS)



ProFace X(CH/DS)

ProFace X(DS) is a top-notch model of the ProFace X series, along with the series legacy, which is robustly built and reaches IP68 water and dust protection level and IK04 vandal resistance standard. "DS" is named because, this is the first product equipped with a state-of-the-art ZKTeco Dual Spectrum Facial Recognition Algorithm, which intelligently combines near-infrared and visible light facial recognition technology together to make up a deficiency by the surplus and reached a new height of facial recognition performance in all aspects, especially supporting all human races. It's also greatly enhanced its facial recognition performance to tackle all extreme lighting conditions. From dark light (as low as 0 lux) to extremely strong light (100,000 lux) the facial recognition performance is still as good as under normal sunlight in terms of recognition speed, accuracy, distance and pose angle tolerance.

ProFace X(DS) is powered by the ZKTeco-customized computer vision CPU for running the ZKTeco Dual Spectrum Facial Recognition Algorithm, compared with the previous ProFace series, this new technology has improved the accuracy of facial recognition by 26% and can work with everyone. It supports facial verification when people are walking or running, with large capacity and rapid recognition speed. Also, the facial camera support scramble QR code with Mobile APP, as well as improves security performance in all aspects. The ProFace X(DS) series offers masked individual identification and mask detection, that helps eliminate hygiene concerns with the contactless recognition technology.

Features

- ZKTeco Dual Spectrum Facial Recognition intelligently combined Near-Infrared and Visible Light technology
- Darklight Facial Recognition without LED Flash
- Ultra-large capacity of facial templates; 1:N 30,000 facial templates (standard), maximum 1:N 50,000 facial templates (optional)
- Rapid facial recognition within 0.3s
- Works with everyone and improved the accuracy of facial recognition by 26%
- · Anti-spoofing algorithm against print attack (laser, color and B/W photos), videos attack, and 3D mask attack
- IP68 dust-proof and waterproof standard and IK04 protection standard
- 2MP starlight CMOS sensor camera with WDR function, which enables the terminal to recognize faces under extreme lighting conditions (0 - 100,000 lux)
- Mask detection; facial recognition available with masks
- Supports static QR code and scramble / dynamic QR code with ZKBioSecurity Mobile APP (optional)
- * Facial recognition for masked individuals will increase FAR.
- * ProFace X (DS) comes standard with 100,000 lux light intensity hardware, and supports optional 50,000 lux light intensity hardware



Specifications (© GL Exclusive Feature)

Capacity

G Faces 30,000 (1:N)

50,000 (Optional)

Users / Cards 50,000

QR Code 50,000 (Static / Dynamic)

G Transactions 1,000,000

2,000,000 (Optional)

User Photos 10,000 Event Photos 7,500

Compatibility

Security Relay Box Wiegand (IC / ID) / RS485 Slave Reader with FP / RFID RS232 External Printer ZKBioSecurity Software ZSmart App

Standard Functions

Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Custom Wallpaper & Screen Saver, Tamper Switch Alarm

Hardware

- 1.2GHz Quad-core Customized Computer Vision CPU
- ☐ 1GB RAM / 8G Flash8" High light Touch LCD
- G 125KHz EM / 13.56MHz MF (Optional) 2MP WDR Low Light Camera Adjustable Light Brightness LED Hi-Fi Voice Receiver Sensitivity Microphone Reset Button and Tamper Switch

Special Functions

- **G** IP68 & IK04
- G 0.3s High Speed Face Verification Live Face Detection Https communication Encrypted (optional)
- **G** Event Snapshot
- **ு** Works with everyone
- ▶ Dual Spectrum Facial Recognition Compatible with all ZKTeco's Visible Light Facial Recognition facial templates

Access Control Interface

Lock Relay Output
Alarm Output / Auxiliary Input
Exit Button / Door Sensor

Communication

TCP/IP

Wiegand Input / Output Wi-Fi (Optional) RS485 / RS232

Additional Info

Operating Temperature: -20°C to 55°C, (-4°F~ 131°F)
Working Humidity: ≤90%
Storage Temperature: -25°C to +65°C
Storage Humidity: ≤93%
Dimensions (H*L*D): 227*143*26mm
Supports QR Code (Statics / Dynamic)

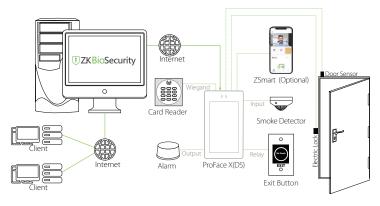
Face Algorithm: ZKLiveFace5.95

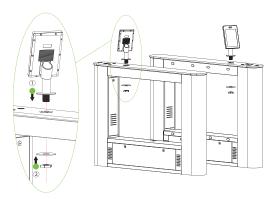
Power

as an option

Operating Voltage 12V DC Current Draw < 3.000mA

Configuration

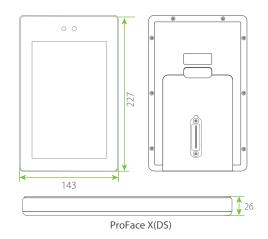


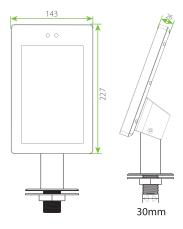


ProFace X(DS)

ProFace X(CH/DS)

Dimensions (mm)





ProFace X(CH/DS)

Comparison

G Transactions 1,000,000 (Optional 2,000,000) Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver 900MHz Dual Core Customized Computer Vision CPU Distance Detection Sensor G 1.2GHz Quad-core Customized Computer Vision CPU Distance Detection Sensor G 1.2GHz Quad-core Customized Computer Vision CPU Distance Detection Sensor G 16B RAM / 8G Flash, 2MP WDR Low Light Camera, Adjustable Light brightness LED,Hi-Fi Voice, Receiver sensitivity Microphone, Reset Button and Tamper Switch TCP/IP, Wiegand Input / Output , Wi-Fi (Optional) , RS485 / RS232 Access Control Interface Lock Relay Output, Alarm Output / Auxiliary Input, Exit Button / Door Sensor G IP68 & IK04, G 0.3s Rapid Facial Verification, Liveness Detection, HTTPS Communication Encryption, Event Snapshot Working Temperature: -30°C to 60°C, (-22°F to 140°F) Working Humidity: ≤93% Working Humidity: ≤99%	•				
Platform ZAM170 / ZAM180 ZAM170 ZAM200 Display 8-inch Touch Screen Verification Mode User Capacity 50,000 ☐ Face Capacity 50,000 N/A N/A N/A Card Capacity 50,000 So,000 (Optional) Palm Capacity 50,000 N/A N/A N/A Card Capacity 50,000 (Dynamic) 50,000 (Optional) RFID Function Standard ID Card, IC Card Optional IC Card optional Optional IC Card Optional I	Model	ProFace X	ProFace X(SL)	ProFace X(DS)	
Display 8-inch Touch Screen Verification Mode Face+Card+Palm+QR Code Face+Card Face+Card+QR Code User Capacity 50,000 50,000 Ø Face Capacity 50000 N/A N/A Palm Capacity 50,000 50,000 (Optional) 50,000 QR Code Capacity 50,000 (Dynamic) / 50,000 (Statics / Dynamic) RFID Function Standard ID Card, IC Card Optional IC Card optional Standard ID Card, IC Card Optional Ø Transactions 1,000,000 (Optional 2,000,000) Standard Functions Standard Functions Standard Functions Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver B 900MHz Dual Core Customized Computer Vision CPU © 108 RAM / 8G Flash, 2MP WDR Low Light Camera, Adjustable Light brightness LED,Hi-Fi Voice, Receiver sensitivity Microphone, Reset Button and Tamper Switch Communication TCP/IP, Wiegand Input / Output, Wi-Fi (Optional), RS485 / RS232 Access Control Interface Lock Relay Output, Alarm Output / Auxiliary Input, Exit Button / Door Sensor Special Functions Working Temperature: -30°C to 60°C, (-22°E to 140°E) Working Temperature: -20°C to 55°C Storage Temperature: -25°C	OS System	Linux			
Verification Mode Face+Card+Palm+QR Code Face+Card Face+Card+QR Code User Capacity 50,000 50,000 N/A N/A Palm Capacity 50000 N/A N/A Card Capacity 50,000 50,000 (Optional) 50,000 QR Code Capacity 50,000 (Dynamic) / 50,000 (Statics / Dynamic) RFID Function Standard ID Card, IC Card Optional IC Card optional Standard ID Card, IC Card Optional © Transactions 1,000,000 (Optional 2,000,000) Standard ID Card, IC Card Optional Standard ID Card, IC Card Optional Standard Functions Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver © 900MHz Dual Core Customized Computer Vision CPU © 168 RAM / 86 Flash, 2MP WDR Low Light Camera, Adjustable Light brightness LED,Hi-Fi Voice, Receiver sensitivity Microphone, Reset Button and Tamper Switch Communication TCP/IP, Wiegand Input / Output, Wi-Fi (Optional), RS485 / RS232 Access Control Interface Lock Relay Output, Alarm Output / Auxiliary Input, Exit Button Door Sensor Special Functions Working Temperature: -30°C to 60°C, (-22°E to 140°F) Working Temperature: -20°C to 55°C, (-4°E to 131°F) <	Platform	ZAM170 / ZAM180	ZAM170	ZAM200	
User Capacity ☐ Face Capacity ☐ Face Capacity ☐ Sound (Optional) ☐ Face Capacity ☐ Sound (Optional) ☐ Sound (Optional) ☐ Sound (Optional) ☐ Sound (Optional) ☐ Standard ID Card, IC Card ☐ Optional ☐ Transactions ☐ Transactions ☐ Transactions ☐ Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, ☐ Tamper Switch Alarm, Custom Wallpaper & Screen Saver ☐ 900MHz Dual Core Customized Computer ☐ Vision CPU ☐ Distance Detection Sensor ☐ 1.2GHz Quad-core Customized ☐ Computer Vision CPU ☐ Distance Detection Sensor ☐ 1.2GHz Quad-core Customized ☐ 1.2GHz Quad-core Customized ☐ 1.2GHz Quad-core Customized ☐ 1.2GHz Quad-core Customized ☐ Computer Vision CPU ☐ Distance Detection Sensor ☐ 1.2GHz Quad-core Customized ☐ Computer Vision CPU ☐ Distance Detection Sensor ☐ 1.2GHz Quad-core Customized ☐ 1.2GHz Quad-core Customized ☐ 1.2GHz Quad-core Customized ☐ Computer Vision CPU ☐ 1.2GHz Quad-core Customized ☐ 1.2GHz Quad-core Customized ☐ Computer Vision CPU ☐ 1.2GHz Quad-core Customized ☐	Display	8-inch Touch Screen			
### SPace Capacity \$0,000 \$0,000 (Optional) \$0,000 (Optional) \$0,000 \$0,000 (Optional) \$0,000 \$0,000 (Optional) \$0,000 (Optional)	Verification Mode	Face+Card+Palm+QR Code	Face+Card	Face+Card+QR Code	
Palm Capacity 5000 N/A N/A Card Capacity 50,000 50,000 (Optional) 50,000 QR Code Capacity 50,000 (Pynamic) / 50,000 (Statics / Dynamic) RFID Function 51,000,000 (Optional 2,000,000) Standard ID Card, IC Card Optional IC Card Optional Standard ID Card, IC Card Optional Optional 2,000,000 (Optional 2,000,000) Standard Functions 1,000,000 (Optional 2,000,000) Standard Functions 1,000,000 (Optional 2,000,000) Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver Power 1,200,000 (Optional 2,000,000) Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver Power 1,200,000 (Optional 2,000,000) Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver Power 1,200,000 (Optional 2,000,000) Access Control Malarm, Custom Wallpaper & Screen Saver Power 2,200,000 (Optional 2,000,000) Norling Flamper Switch Alarm, Custom Wallpaper & Screen Saver Power 1,200,000 (Optional 2,000,000) Record Standard ID Card, IC Card Optional Power 1,000,000 (Optional 2,000,000) Power 1,000,000 (Optional 2,000,000 Power 1,000,00	User Capacity	50,000			
Card Capacity 50,000 50,000 (Optional) 50,000 QR Code Capacity 50,000 (Dynamic) / 50,000 (Statics / Dynamic) RFID Function Standard ID Card, IC Card Optional IC Card optional Standard ID Card, IC Card Optional Ø Transactions 1,000,000 (Optional 2,000,000) Standard Functions Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver By 900MHz Dual Core Customized Computer Vision CPU © 108 RAM / 8G Flash, 2MP WDR Low Light Camera, Adjustable Light brightness LED,Hi-Fi Voice, Receiver sensitivity Microphone, Reset Button and Tamper Switch Communication TCP/IP, Wiegand Input / Output , Wi-Fi (Optional) , RS485 / RS232 Access Control Interface Lock Relay Output , Alarm Output , Auxiliary Input , Exit Button / Door Sensor Special Functions By 168 & IKO4, Ø.0.3s Rapid Facial Verification, Liveness Detection, HTTPS Communication Encryption, Ø Event Snapshot Working Temperature: -30°C to 60°C, (22°F to 140°F) (-4°F to 131°F) Additional Info Working Humidity: ≤93% Storage Temperature: -20°C to +65°C Storage Temperature: -25°C to +65°C Storage Temperature: -25°C to -65°C Storage Temperature: -25°C	Face Capacity	30,000(1:N), 50,000 (Optional)			
QR Code Capacity 50,000 (Dynamic) / 50,000 (Statics / Dynamic) RFID Function Standard ID Card, IC Card Optional IC Card optional Standard ID Card, IC Card Optional Ø Transactions 1,000,000 (Optional 2,000,000) Standard Functions Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver Hardware 900MHz Dual Core Customized Computer Vision CPU 1.2GHz Quad-core Customized Computer Vision CPU Distance Detection Sensor Computer Vision CPU Computer Vision CPU Distance Detection Sensor Computer Vision CPU Computer Vision CPU Communication TCP/IP, Wiegand Input / Output, Wi-Fi (Optional), RS485 / RS232 Access Control Interface Lock Relay Output, Alarm Output / Auxiliary Input, Exit Button / Door Sensor Special Functions P168 & IK04, Ø-0.3s Rapid Facial Verification, Liveness Detection, HTTPS Communication Encryption, Ø-Event Snapshot Working Temperature: -30°C to 60°C, (22°F to 140°F) (-4°F to 131°F) Working Humidity: ≤93% Working Humidity: ≤90% Storage Temperature: -25°C to +65°C Storage Temperature: -25°C to +65°C Storage Temperature: -25°C to +65°C Storage Temperature: -25°C to +65°C Storage Temperature: -25°C to +65°C <th>Palm Capacity</th> <th>5000</th> <th>N/A</th> <th>N/A</th>	Palm Capacity	5000	N/A	N/A	
Standard ID Card, IC Card Optional IC Card Optional Standard ID Card, IC Card Optional Optional Optional I,000,000 (Optional 2,000,000) Standard Functions IC Card Optional I,000,000 (Optional 2,000,000) Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver G 900MHz Dual Core Customized Computer Vision CPU Distance Detection Sensor G 1GB RAM / 8G Flash, 2MP WDR Low Light Camera, Adjustable Light brightness LED,Hi-Fi Voice, Receiver sensitivity Microphone, Reset Button and Tamper Switch Communication TCP/IP, Wiegand Input / Output , Wi-Fi (Optional) , RS485 / RS232 Access Control Interface Lock Relay Output, Alarm Output / Auxiliary Input, Exit Button / Door Sensor G IP68 & IK04, G 0.3s Rapid Facial Verification, Liveness Detection, HTTPS Communication Encryption, G Event Snapshot Working Temperature: -30°C to 60°C, (-4°F to 131°F) Working Humidity: ≤93% Storage Temperature: -40°C to +65°C Storage Humidity: ≤93% Storage Temperature: -40°C to +65°C Storage Humidity: ≤93% Power Algorithms ZKLiveFace5.6 (ZAM170) ZKLiveFace5.8 (ZAM180)	Card Capacity	50,000	50,000 (Optional)	50,000	
Card optional Card optional Standard ID Card, IC Card Optional	QR Code Capacity	50,000 (Dynamic)	/	50,000 (Statics / Dynamic)	
Access Levels, Groups, Holidays, DST, Duress Mode (Password), Anti-Passback, Record Query, Tamper Switch Alarm, Custom Wallpaper & Screen Saver ■ 900MHz Dual Core Customized Computer Vision CPU Distance Detection Sensor ■ 1.2GHz Quad-core Customized Computer Vision CPU Distance Detection Sensor ■ 1.2GHz Quad-core Customized Computer Vision CPU ■ 1.2GHz Quad-core Lustomized Computer Vision CPU ■ 1.2GHz Quad-core Customized Computer Vision CPU ■ 1.2GHz Quad-core Customized Computer Vision CPU ■ 1.2GHz Qua	RFID Function		IC Card optional	Standard ID Card, IC Card Optional	
Tamper Switch Alarm, Custom Wallpaper & Screen Saver ■ 900MHz Dual Core Customized Computer Vision CPU Distance Detection Sensor ■ 1.2GHz Quad-core Customized Computer Vision CPU Distance Detection Sensor ■ 1.2GHz Quad-core Customized Computer Vision CPU ■ 1.2GHz Quad-core Lustomized Computer Vision CPU ■ 1.2GHz Quad-core Lustomice Computer Vision Computer Vision Computer Vision Computer Vision Computer V	Transactions	1,000,000 (Optional 2,000,000)			
Hardware Distance Detection Sensor	Standard Functions				
G 1GB RAM / 8G Flash, 2MP WDR Low Light Camera,	Hardware	Vision CPU Distance Detection Sensor		Computer Vision CPU	
Access Control InterfaceLock Relay Output, Alarm Output / Auxiliary Input, Exit Button / Door SensorSpecial FunctionsPf68 & IK04,		Adjustable Light brightness LED,Hi-Fi Voice,			
Special Functions □ IP68 & IK04, □ 0.3s Rapid Facial Verification, Liveness Detection, HTTPS Communication Encryption, □ Event Snapshot Working Temperature: -30°C to 60°C, (-22°F to 140°F) Working Humidity: ≤93% Storage Temperature: -40°C to +65°C Storage Humidity: ≤93% Storage Humidity: ≤93% Power Voltage: DC 12V, Current: Max. 3A ZKLiveFace5.6 (ZAM170) ZKLiveFace5.8 (ZAM180) ZKLiveFace5.8 (ZAM180) ZKPalm V12.0 Dimensions (H*L*D) Software ZKBioSecurity	Communication	TCP/IP, Wiegand Input / Output , Wi-Fi (Optional) , RS485 / RS232			
HTTPS Communication Encryption, Sevent Snapshot Working Temperature: -30°C to 60°C,	Access Control Interface	Lock Relay Output, Alarm Output / Auxiliary Input, Exit Button / Door Sensor			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Special Functions				
Algorithms ZKLiveFace5.6 (ZAM170) ZKLiveFace5.8 (ZAM180) ZKLiveFace5.8 ZKLiveFace5.95 ZKPalm V12.0 / / Dimensions (H*L*D) 227*143*26mm Software ZKBioSecurity	Additional Info	(-22°F to 140°F) Working Humidity: ≤93% Storage Temperature: -40°C to +65°C		Working Humidity: ≤90% Storage Temperature: -25°C to +65°C	
Algorithms ZKLiveFace5.8 (ZAM180) ZKLiveFace5.8 ZKLiveFace5.95 ZKPalm V12.0 / / Dimensions (H*L*D) 227*143*26mm Software ZKBioSecurity	Power	Voltage: DC 12V, Current: Max. 3A			
Dimensions (H*L*D)227*143*26mmSoftwareZKBioSecurity	Algorithms		ZKLiveFace5.8	ZKLiveFace5.95	
Software ZKBioSecurity		ZKPalm V12.0	/	/	
,	Dimensions (H*L*D)	227*143*26mm			
Mobile App Zsmart / Zsmart	Software		ZKBioSecurity		
	Mobile App	Zsmart	/	Zsmart	



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