

FR1500S

Robust Multi-Factor Biometric Reader — OSDP Compatible



OSDP



RFID



Fingerprint



IP65 Waterproof
& Dustproof



AES 128
Encryption



FR1500S is a biometric reader that supports multiple authentication methods, including fingerprint and RFID card verification. It supports multiple authentication methods, including fingerprint verification and RFID card verification, making it an ideal solution for high-security environments. Compatible with 125 kHz ID cards (standard) and 13.56 MHz IC cards (optional), the FR1500S offers flexibility to meet diverse user needs.

FR1500S chassis is made of SUS304 stainless steel, and it achieved IP65 protection rating for waterproof and dust proof, ensuring smooth operation in outdoor and challenging weather conditions.

Equipped with the latest-generation Z-ID fingerprint sensor, the FR1500S captures high-resolution fingerprint images and converts them into secure fingerprint templates. These templates are transmitted securely via RS-485 communication to access control terminals or controllers. To ensure data integrity, the device uses AES128 encryption during transmission, with an option to disable encryption through software for flexible deployment based on user security needs. The FR1500S supports OSDP (Ver2.1.7) and ZK-RS485 communication protocols, enabling seamless integration with ZKTeco's advanced access control systems, such as the InBio Pro Plus series and other fingerprint terminals. Its compatibility simplifies deployment across various security setups, providing a reliable and scalable solution for access control management.

Features

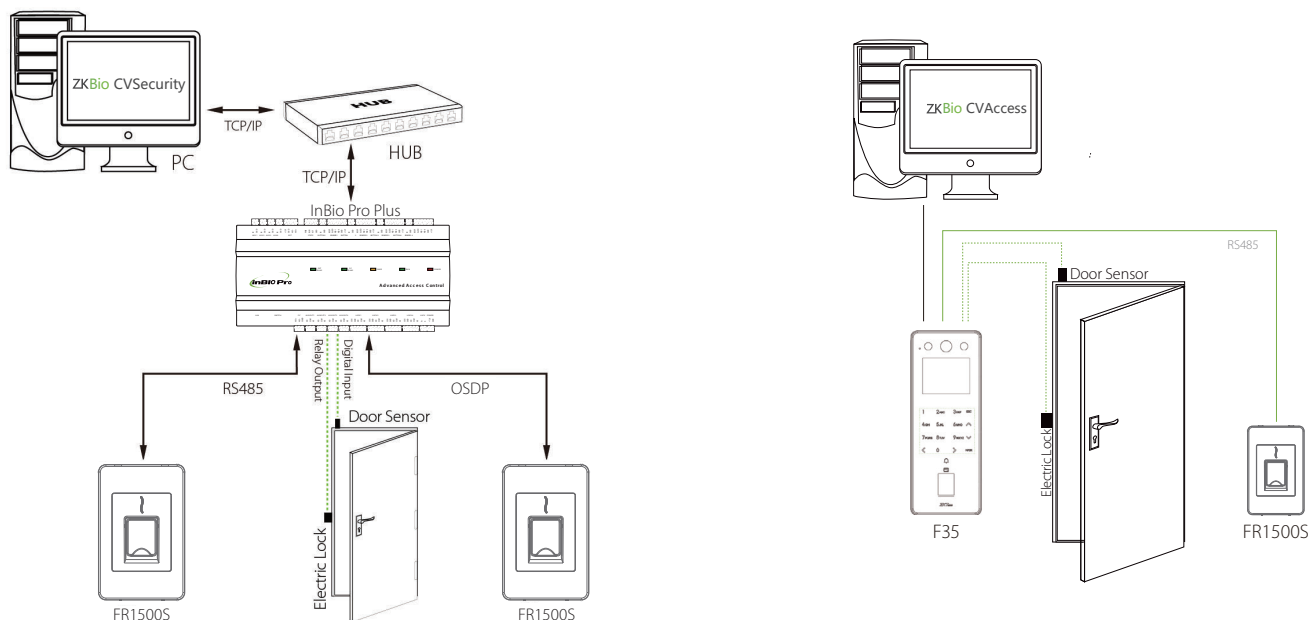
- Multi-factor authentication: Fingerprint and RFID card verification.
- Supports 125 kHz ID cards (standard) and 13.56 MHz IC cards / Encrypted DESFire card (optional) and ID & IC & Encrypted DESFire card (Model: FR1500, optional).
- Durable SUS304 stainless steel chassis with IP65 rating for outdoor use.
- Advanced Z-ID fingerprint sensor for precise biometric authentication.
- Secure data transmission with AES128 encryption (configurable).
- Compatible with OSDP (Ver2.1.7) and ZK-RS485 protocols.
- Ideal for integration with ZKTeco's InBio Pro Plus and other access control systems. Supports wall mounting using a single gang box.

Specifications

Model	FR1500S
Hardware	Physical Keypad: NA Fingerprint Sensor: Z-ID (Image Resolution 500DPI / Effective Collecting Area 15.24 * 20.32 mm/Image Size 300 * 400 pixels) RFID Module: ID Standard (Standard), IC Optional (Optional)
Authentication method	Fingerprint / Card
Card Type	ID Card@125 kHz (Standard) IC Card@13.56 MHz (Optional) Encrypted DESFire Card @ 13.56 MHz (Optional) ID Card & IC Card & Encrypted DESFire Card @ 125 kHz & 13.56 MHz (Model: FR1500, Optional) HID Proxy @ 125 kHz (Optional) HID iCLASS @ 13.56 MHz (Optional)
Biometric Verification Speed	< 0.3s @ Fingerprint
Touchless Biometric Recognition Distance	< 5 cm @ Card
False Acceptance Rate (FAR) %	FAR≤ 0.0001%
False Rejection Rate (FRR) %	FRR≤ 0.01%
Biometric Algorithm	ZKFingerprint V10.0 (Default) / V13.0
Communication	RS485: ZKTeco RS485 *1/OSDP (Ver 2.1.7)
Visual Indicator	LED (Blue = Standby) (Green = Verification Successful) (Red = Verification failed)
Audio Indicator	Beeper
Operating Environment	Indoor / Outdoor / Semi-Enclosed Area
Power Supply	9VDC to 24VDC
Operating Temperature	-10 °C to 45 °C
Operating Humidity	10% to 90% RH (Non-condensing)
Dimensions	121mm * 77.3mm * 38mm (L*W*H)
Gross Weight	0.26 Kg

Net Weight	0.20 Kg
Installation	Wall Mount (compatible with single gang box)
Housing Material	SUS304 Stainless Steel and ABS Plastic
Ingress Protection Rating	IP65
Certifications	ISO14001, ISO9001, CE, FCC, RoHS

Configuration



Dimensions (mm)

