Frequently Asked Question

Fingerprint attendance device EFace10

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Sure! Here's a helpful overview of frequently asked questions (FAQ) for the **ZKTeco EFace10** device, which is a facial recognition terminal used for time attendance and access control:

Q.1: What is the EFace10?

- A **touchless facial identification terminal** using **Visible Light Facial Recognition**.
- Designed for **time attendance** and **access control** in offices and secure facilities.
- Supports **face, card, and password** verification methods.

Q.2: What are its key features?

- **Face Capacity**: 500 (expandable to 1,500)
- **User/Card Capacity**: 1,000 (optional 1,500)
- **Transaction Capacity**: 150,000 logs
- **Display**: 4.3-inch touch screen
- **Communication**: TCP/IP, Wi-Fi (optional), USB Host
- **Operating System**: Linux

Q.3: How do I register users?

There are **three methods**:

1. **On the device**: Use the touchscreen to add users and set roles.
2. **Via ZKBioAccess IVS software**: Connect the device to a PC and manage users remotely.
3. **Using a mobile phone**: Scan a QR code generated by the software to register via browser.

Q.4: How do I install and power the device?

- Recommended **indoor installation** away from direct sunlight and heat sources.
- Power supply: **12V ±10%, at least 1500mA**
- Supports **backup battery** for up to 2 hours of operation.

Q.5: What software is compatible?

- **ZKBio CVAccess** and **ZKBioAccess IVS** are supported for device management, user registration, and attendance tracking.

Q.6: Where can I find manuals and guides?

You can download official documentation from:

- ZKTeco's EFace10 product page
- EFace10 Quick Start Guide (PDF)
- EFace10 User Manual on ManualsLib

Q: Can you explain more about its facial recognition technology?

Absolutely! The **ZKTeco EFace10** uses a cutting-edge approach called **Visible Light Facial Recognition**, which sets it apart from older infrared-based systems. Here's how it works and why it's impressive:

❖ Key Technologies Behind EFace10's Facial Recognition

- **Visible Light Imaging**: Unlike traditional systems that rely on infrared, EFace10 uses standard visible light to detect and recognize faces. This allows for:
  - **Longer detection range**
  - **Faster recognition speed**
  - **Better accuracy in varied lighting conditions**
- **Deep Learning Algorithms**: The device is powered by **ZKLiveFace V3.5**, a deep learning-based algorithm that enhances:
  - **Pose angle tolerance** – it can recognize faces even if they're tilted or turned
  - **Anti-spoofing** – it resists fake attempts using photos, videos, or 3D masks
- **Touchless Operation**: Recognition is **proactive and hygienic**—the system automatically detects and verifies a face without needing physical contact.
- **Liveness Detection**: Built-in algorithms ensure the face being scanned is real and live, not a static image or replayed video.

❖ Why It's Smarter Than Older Systems

Feature	EFace10 (Visible Light)	Traditional Infrared Systems
Recognition Speed	≤1 second	Slower
Lighting Adaptability	High	Limited
Anti-Spoofing Capability	Advanced (3D mask, video, photo)	Basic (mostly photo)
Pose Flexibility	Wide angle acceptance	Narrow angle only

This makes EFace10 ideal for busy environments like offices, schools, and secure facilities where speed, hygiene, and reliability matter.

Q: How does it enhance security in different environments?

The **ZKTeco EFace10** enhances security across diverse environments by combining advanced biometric technology with flexible integration options. Here's how it adapts and strengthens protection in various settings:

❖ Corporate Offices

- **Access Control**: Restricts entry to authorized personnel using facial recognition, card, or password.
- **Time Attendance**: Tracks employee check-ins and check-outs with high accuracy.
- **Anti-Spoofing**: Prevents tailgating and impersonation using deep learning algorithms that detect fake faces (photos, videos, masks).

❖ Educational Institutions

- **Student Verification**: Ensures only enrolled students access restricted areas like labs or dorms.
- **Touchless Entry**: Promotes hygiene and safety, especially in high-traffic zones.
- **Real-Time Monitoring**: Integrates with campus security systems for live alerts and attendance logs.

❖ Medical Facilities

- **Patient & Staff Identification**: Verifies identities without physical contact, reducing infection risk.
- **Secure Zones**: Controls access to sensitive areas like operating rooms or pharmacies.
- **Audit Trails**: Maintains detailed logs for compliance and accountability.

❖ Government & High-Security Sites

- **Multi-Factor Authentication**: Combines face recognition with card or password for layered security.
- **Environmental Adaptability**: Performs reliably in varied lighting and temperature conditions (0°C to 45°C).
- **Integration with 3rd-Party Systems**: Connects to electric locks, door sensors, and exit buttons for full access control.

❖ Key Security Features

- **Visible Light Facial Recognition**: Detects faces from a distance with high speed and accuracy.
- **Liveness Detection**: Confirms the presence of a real, live person—not a spoof attempt.
- **Pose Angle Tolerance**: Recognizes faces even if turned or tilted, useful in dynamic environments.
