



## ievo ultimate™ Fingerprint Reader

The **ievo ultimate** is a CPNI certified fingerprint scanner that combines an industry leading multispectral imaging sensor with advanced security features.

Employing a high-performance multispectral imaging (MSI) sensor, the *ultimate* delivers a cutting edge biometric solution, simultaneously reading data from both the surface and subsurface levels of a fingerprint even when features are hard to distinguish due to factors such as dirt, moisture and damage.

With advanced encryption for data transmission, the *ultimate* fingerprint reader provides a highly accurate and quality image to reliably allow the **ievo** control board to perform 1:N matching of up to 50,000 (10,000 as standard) fingerprint templates. The reader unit itself does not store any user data for an additional level of protection.

Featuring an IP65 rating and built-in environmental controls, the *ultimate* reader is designed for external deployment and remains operational over time in harsh weather conditions.

Supporting proximity detection and clear LED and audio indications, the reader offers simplicity along with convenience to the user.

### FEATURES:

- 1:N matching up to 50,000 fingerprint templates via the **ievo** control board (10,000 option comes as standard)
- Designed for external and internal use
- IP65 rated for harsh environmental deployment
- Multispectral imaging sensor
- Data transmission AES (128bit) encryption can be enabled
- Secure template storage on a separate **ievo** control board
- Wiegand, clock & data and TCP/IP outputs
- Activated by capacitive proximity detection
- LED and audio indications
- Anti-tamper and vandal resistant
- Seamless integration with large number of existing access control systems
- Built in environmental controls; heater and humidity sensor for external use
- Spoof detection functionality can be enabled
- Approved for UK Government use by the CPNI

# RELIABLE. BIOMETRIC. SOLUTIONS.

## KEY BENEFITS

### Enhanced Image Quality:

A multispectral imaging (MSI) sensor captures high-quality images for more accurate, detailed data collection. Scanning a finger's surface and subsurface with different wavelengths/colours of light to illuminate the fingerprint from different angles, the light penetrates the skin at different depths (up to a depth of 4mm) to build a true digital image, something that 1-directional or 1-colour illumination systems do not capture. MSI image capturing allows the reader to operate through a variety of most skin or environmental conditions that may otherwise hinder an accurate reading from other technologies and results in more reliable data for enhanced identification.

### Data Protection:

**ievo** readers require connection to an **ievo** control board where accurate and secure matching against a stored database is carried out. No information or data is stored directly on a **ievo** reader unit itself for additional security purposes. Data captured by the reader via the MSI sensor can be transmitted using AES (128bit) encryption. The stored template cannot be reverse engineered to replicate the original fingerprint and is only accessed by the **ievo** control board for identification processing.

### Card Reader (optional component):

The card reader module allows the *ultimate* reader to operate and process a number of widely used identification cards\*. The option can be used either in conjunction with/or replacing most pre-installed card readers, without having to install a new system. The function provides options of integration with an existing system to add an additional level of biometric identification for access control security and/or time and attendance recording.

\*Check card compatibility via our free card checking service

### 1:1 Template on Card:

Combining smart card technology with biometrics provides a way to create a positive binding of the smart card to the card holder, therefore providing strong verification and authentication of the card holders' identity. Templates are stored on a card as opposed to a database, thus enabling a vast user capacity.

### IP65 Rated:

Can endure deployment in harsh environments where water, dust and dirt are a common hazard. Totally protected against dust ingress. Protected against low pressure water jets from any direction. Limited ingress permitted.

### Internal or External Use:

Designed for enduring harsh environments deployment the IP65 rating proves the reader can withstand a number of environmental hazards making it ideal for external use. The vandal resistant (IK10, in-house certified) casing provides further protection to external entry points and high security internal spaces. The built-in environmental controls ensures maintained functionality in cold and humid temperatures. Mounting options gives flush or surfaced installation options both internally and externally. The *ultimate* does not activate or connect directly to relays or controllers to open entry points, meaning that removal of a device will not expose your security protocols.

### Integration into Existing Systems :

With seamless integration being a core component to the development of **ievo** solutions, our readers have been designed to assimilate with a large number of security systems via existing protocols. **ievo** fingerprint readers integrate into a host of access control systems and other security products, please contact an **ievo** account manager for more information on integrated systems.

### Anti-Tamper:

A 3 axis accelerometer detects attempted tampering alongside continually monitoring the data communication and voltage lines. Any tamper event is immediately transmitted to the access control unit for action.

### Easy to Use Registration Software:

Easy to use registration software is provided that can work as a standalone registration process or **ievo** systems can be integrated into an existing registration software package. For more information on integrated registration software please check with your account manager.

### Spoof Protection:

The scanning technique used by the *ultimate* MSI sensor helps to prevent fraudulent activity such as using fake and spoof fingerprints. Due to capturing deep tissue data which in turn helps to mould the surface fingerprint, the sensor can differentiate between live human fingerprints as opposed to false prints made with synthetic materials. This is an optional function of the reader which can be activated via software provided, (this function is off by default).

### Customise Your System (optional components):

Bespoke reader unit colours  
Card reader module  
Surface/flush mounting options  
Additional vandal resistant shroud

Multispectral Imaging: Fingerprint image quality conditions					
Fingerprint Conditions:	Condition A: Dry	Condition B: Moist	Condition C: Dirty	Condition D: Eldery	Condition E: High levels of ambient light
<b>ievo</b>					
Other Biometric Readers			NO IMAGE		NO IMAGE

## SPECIFICATIONS:

CPU	ARM	
Connection	Shielded (S-FTP) Cat5e/6 cable	
Voltage	12V	
Current Draw	600mA	
Communication	RS-422 (1Mbit/s)	
Controller	<b>ievo</b> Control Board	
Operating Temperature	-20~70°C	
Power Indicator	LED	
IP Rating	IP65	
Certifications	CE, FCC, CPNI	
Dimensions	Standard Wall Mount Width: 93mm Height: 128mm Depth: 93mm	Flush Mounted Width: 119mm Height: 153mm Depth/Recessed: 47mm Depth/Visible: 45.5mm

For more information contact us:



[info@ievoreader.com](mailto:info@ievoreader.com)



+44 (0)191 296 3623  
or 0845 643 6632