TOUCHLESS FINGERPRINTING

3D ENROLL

Three-dimensional and contact-free sensor for enrollment and generation of templates in connection with a PC.

- 3D touchless technology
- Access Control, T&A, Civil ID
- Highest security level
- No “Failure to Enroll”
- Superior image quality
- Nail-to-nail images
- Quality assessment and duplicate check
- Identification for large databases
- Hygienic for sensitive applications
### Applications
- Access Control
- Time & Attendance
- Civil/Criminal

### Sensor
- Touchless, 3D-Multiview
- Optical Touch, FBI-certified

### User Interface
- 5.0" Touchscreen
- 3.5" Touchscreen
- RFID
- PIN
- Camera
- Microphone
- Speaker
- Beeper

### Biometrics
- Identification (1:N)
- Verification (1:1)
- Database Capacity: 20'000, 50'000, 50'000, 50'000, 50'000, 50'000
- Recommended Database for 1:N: unlimited, ≈5'000, ≈5'000, ≈1'000, ≈1'000
- FRR at FAR 1:100'000: <0.5%, <2%, <2%, <2%, <2%

### Communication
- LAN
- WLAN
- USB

### Interfaces
- RS 232 / RS 485
- Wiegand
- Relay Output: [2], [2], [2], [2], [2], [2], [2]
- I/O: (1/1), 2/2

### Security
- Liveness Detection
- Multi-level Data Encryption
- Template on Card
- Anti-tampering / Silent Alarm

### Conditions
- Operating Temperature in °C: 0–60, 0–60, 0–60, 0–60, 0–60, 0–60, 0–60
- Humidity: 10–90%

### Mounting
- Wall mount
- Flush mount / Outdoor
- Outdoor device roof: (•)², (•)², (•)², (•)², (•)², (•)²

### Certifications
- CE

( ) = optional ² = outside of device ² = required if not sheltered
3D TERMINAL

Three-dimensional and contact-free terminal for highest security and multifunctionality at point of access.

- 3D touchless technology
- Access Control, Time and Attendance (T&A)
- In- and outdoor use
- Flush or surface mount
- Highest security level
- Superior identification performance
- No “Failure to Enroll”
- Identification or verification
- Small- and large-sized user groups
- Personalizable touchscreen
- Variable configuration and customizing
- Optional RFID, camera, liveness detection
- Stand-alone and network capability
- Hygienic for sensitive applications

Touchless Fingerprinting

Terminals / Stations

PC

USB

Enroll Device

LAN/WAN

Terminals / Stations
### Applications
- Access Control
- Time & Attendance
- Civil/Criminal

### Sensor
- Touchless, 3D-Multiview
- Optical Touch, FBI-certified

### User Interface
- 5.0" Touchscreen
- 3.5" Touchscreen
- RFID
- PIN
- Camera
- Microphone
- Speaker
- Beeper

### Biometrics
- Identification (1:N)
- Verification (1:1)
- Database Capacity
  - 20/000
  - Recommendations Database for 1:N
  - unlimited

### Communication
- LAN
- WLAN
- USB

### Interfaces
- RS 232 / RS 485
- Wiegand
- Relay Output
- Modular (1/1)

### Security
- Liveness Detection
- Multi-level Data Encryption
- Template on Card
- Anti-tampering / Silent Alarm

### Conditions
- Input Supply Voltage DC
  - 5V
  - 9–30V
- Max. Power Rating
  - 20W
  - 25W
  - 15W
  - 10W
- Operating Temperature
  - 0–60°C
  - 20–60°C
- Maximum Humidity
  - 10–90%

### Mounting
- Wall mount
- Flush mount / Outdoor
- Outdoor device roof

### Certifications
- CE

---

(1) = optional  
1 = outside of device  
2 = required if not sheltered
2D ENROLL

Touch-based biometric sensor for enrollment and generation of templates in connection with a PC.

- Optical touch sensor, FBI certified
- Access Control, T&A, Civil ID
- Excellent identification performance
- Small- and medium-sized user groups
- Quality assessment and duplicate check

TOUCH FINGERPRINTING

Device

PC

LAN/WAN

USB

Enroll Device

Terminals / Stations
Applications

<table>
<thead>
<tr>
<th>Applications</th>
<th>2D ENROLL</th>
<th>2D ENROLL</th>
<th>2D TERMINAL</th>
<th>2D TERMINAL</th>
<th>2D STATION</th>
<th>1D MAXI</th>
<th>2D MINIHOME</th>
<th>SMART CONTROLLER</th>
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Biometrics

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<tr>
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<th>2D ENROLL</th>
<th>2D TERMINAL</th>
<th>2D TERMINAL</th>
<th>2D STATION</th>
<th>1D MAXI</th>
<th>2D MINIHOME</th>
<th>SMART CONTROLLER</th>
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Recommended Database for 1:N

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FRR at FAR 1:100’000

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Standalone Capability

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Communication

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Interfaces

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Security

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Conditions

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Mounting

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<td>Flush mount / Outdoor</td>
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Certifications

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Notes:

(1) = optional
(2) = required if not sheltered

(3) = outside of device
2D TERMINAL

Touch-based biometric terminal for high security and multi-functionality at point of access.

- Optical touch sensor, FBI certified
- Excellent identification performance
- Access Control, Time & Attendance (T&A)
- In- and outdoor use
- Flush or surface mount
- Identification or PIN-verification
- Small- and medium-sized user groups
- Personalizable touchscreen
- User-friendly operation and configuration
- Customer-specific modifications
- Stand-alone and network capability
- Vandalism resistant
Touchless Biometric Systems AG
Rietbrunnen 2
8808 Pfäffikon SZ
Switzerland
tbs@tbs-biometrics.com
www.tbs-biometrics.com

Applications
Access Control • • • • • • •
Time & Attendance • • • • • • • •
Civil/Criminal • •

Sensor
Touchless, 3D-Multiview • •
Optical Touch, FBI-certified • • • • • •

User Interface
5.0" Touchscreen •
3.5" Touchscreen •
RFID (•) (•) • •
PIN • •
Camera (•)
Microphone •
Speaker •
Beeper • • • • • •

Biometrics
Identification (1:N) • • • • • •
Verification (1:1) • • •
Database Capacity 20'000 50'000 50'000 50'000 50'000 50'000
Recommended Database for 1:N unltd -5'000 -5'000 -1'000 -1'000
FRR at FAR 1:100'000 <0.5% <2% <2% <2% <2%
Standalone Capability • • • • • •

Communication
LAN • • • • • • • •
WLAN ([•]) ([•]) ([•]) ([•]) ([•]) ([•]) ([•])
USB • •

Interfaces
RS 232 / RS 485 • • • • • • • •
Wiegand • • • • • • • •
Relay Output [2] ([2]) ([2]) ([2]) ([2]) ([2]) 2
I/O ([1]) ([1]) 2/2

Security
Liveness Detection (•) (•)
Multi-level Data Encryption • • • • • •
Template on Card (•) (•) (•)
Anti-tampering / Silent Alarm (•) (•) (•) (•) (•)

Conditions
Operating Temperature in °C 0–60 0–60 0–60 0–60 0–60 0–60 0–60 0–60 0–60
Humidity 10–90% • • • • • • • •

Mounting
Wall mount • • • • • • •
Flush mount / Outdoor • • • • • • •
Outdoor device roof (•) (•) (•) (•) (•) (•) (•)

Certifications
CE • • • • • • •

(•) = optional 1 = outside of device 2 = required if not sheltered
2D STATION

Touch-based biometric station in combination with RFID for high security and convenience at point of access.

- Optical touch sensor, FBI certified
- Excellent identification performance
- Access Control and T&A (In/Out)
- In- and outdoor use
- Flush or surface mount
- Identification or RFID-verification
- Small- and medium-sized user groups
- Intuitive guidance by means of light ring
- Stand-alone and network capability
- Vandalism resistant

TOUCH FINGERPRINTING

Terminal / Stations

USB

PC

LAN/WAN

Enroll Device

Terminals / Stations
# TBS Biometric Systems AG

**Rietbrunnen 2**
8808 Pfäffikon SZ
Switzerland

**tbs@tbs-biometrics.com**
**www.tbs-biometrics.com**

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## 2D STATION

<table>
<thead>
<tr>
<th>2D STATION</th>
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<tbody>
<tr>
<td>100 mm</td>
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<tr>
<td>Flush mount</td>
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<tr>
<td>60 mm</td>
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<td>75 mm</td>
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## Applications
- **Access Control**
- **Time & Attendance**
- **Civil/Criminal**

## Sensor
- **Touchless, 3D-Multiview**
- **Optical Touch, FBI-certified**

## User Interface
- **5.0" Touchscreen**
- **3.5" Touchscreen**
- **RFID** (•)
- **PIN** (•)
- **Camera** (•)
- **Microphone** (•)
- **Speaker** (•)
- **Beeper** (•)

## Biometrics
- **Identification (1:N)** (•)
- **Verification (1:1)** (•)
- **Database Capacity**
  - 20'000
  - 50'000
  - 50'000
  - 50'000
  - 50'000

## Communication
- **LAN** (•)
- **WLAN** (•)
- **USB** (•)

## Interfaces
- **RS 232 / RS 485** (•)
- **Wiegand** (•)
- **Relay Output** (•)
- **I/O** (•)

## Security
- **Liveness Detection** (•)
- **Multi-level Data Encryption** (•)
- **Template on Card** (•)
- **Anti-tampering / Silent Alarm** (•)

## Conditions
- **Input Supply Voltage DC** 5V
- **Max. Power Rating** 20W
- **Operating Temperature in °C** 0–60
- **Humidity 10–90%**

## Mounting
- **Wall mount** (•)
- **Flush mount / Outdoor** (•)
- **Outdoor device roof** (•)

## Certifications
- **CE** (•)

---

( ) = optional  
1 = outside of device  
2 = required if not sheltered
2D MINI

Touch-based biometric sensor for security and convenience at point of access.

- Optical touch sensor, FBI certified
- Excellent identification performance
- Basic Time & Attendance (In/Out)
- In- and outdoor use
- Flush mount in standard box
- Small user groups
- Intuitive guidance by means of light ring
- Stand-alone and network capability
- Vandalism resistant

TOUCH FINGERPRINTING
### Applications

<table>
<thead>
<tr>
<th>2D ENROLL</th>
<th>2D TERMINAL</th>
<th>2D ENROLL</th>
<th>2D TERMINAL</th>
<th>2D MINI HOME</th>
<th>1D CARD STATION</th>
<th>SMART CONTROLLER</th>
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### Sensor

- Touchless, 3D-Multiview
- Optical Touch, FBI-certified

### User Interface

- 5.0" Touchscreen
- 3.5" Touchscreen
- RFID (•)
- PIN (•)
- Camera (•)
- Microphone •
- Speaker •
- Beeper •

### Biometrics

- Identification (1:N)
- Verification (1:1)
- Database Capacity
  - 20'000
  - 50'000
  - 50'000
  - 50'000
  - 50'000
- Recommended Database for 1:N
  - unlimited
  - <5'000
  - <5'000
  - <1'000
  - <1'000
- FRR at FAR 1:100'000
  - <0.5%
  - <2%
  - <2%
  - <2%
  - <2%
- Standalone Capability • • • • •

### Communication

- LAN • • • • • •
- WLAN (•) (•) (•) (•) (•) (•) (•)
- USB • •

### Interfaces

- RS 232 / RS 485 • • • • • •
- Wiegand • • • • • •
- Relay Output (2) (2) (2) (2) (2) (2) 2
- I/O (1/1) 2/2

### Security

- Liveness Detection (•)
- Multi-level Data Encryption (•)
- Template on Card (•)
- Anti-tampering / Silent Alarm (•)

### Conditions

- Max. Power Rating 20W 25W 15W 10W 10W 10W 10W 5W
- Operating Temperature in °C 0–60 20–60 0–60 20–60 20–60 20–60 20–60 0–60
- Humidity 10–90% • • • • • • • •

### Mounting

- Wall mount • • • • • •
- Flush mount / Outdoor • • • • • •
- Outdoor device roof (•) (•) (•) (•) (•) (•)

### Certifications

- CE • • • • • • • •
2D MINI HOME

Touch-based biometric sensor for keyless entry to your home.

- Optical touch sensor, FBI certified
- Excellent identification performance
- In- and outdoor use
- Flush mount in standard box
- Easy enrollment on sensor
- Intuitive guidance by means of light ring
- Doorbell function
- Vandalism resistant

Diagram:
- PC
- USB
- Enroll Device
- LAN/WAN
- Terminals / Stations
### 2D MINI HOME

**Dimensions:**
- Width: 100 mm
- Height: 58 mm
- Depth: 11 mm

**User Interface:**
- 5.0" Touchscreen
- 3.5" Touchscreen
- RFID
- PIN
- Camera
- Microphone
- Speaker
- Beeper

**Biometrics:**
- Identification (1:N)
- Verification (1:1)
- Database Capacity: 20'000
- Recommended Database for 1:N: unlimited
- FRR at FAR 1:100'000: <0.5%
- Standalone Capability: yes

**Communication:**
- LAN
- WLAN
- USB

**Interfaces:**
- RS 232 / RS 485
- Wiegand
- Relay Output: 2
- I/O: 1 (1)

**Security:**
- Liveness Detection
- Multi-level Data Encryption
- Template on Card
- Anti-tampering / Silent Alarm

**Conditions:**
- Input Supply Voltage DC: 5V
- Max. Power Rating: 20W
- Operating Temperature: 0–60°C
- Humidity: 10–90%

**Mounting:**
- Wall mount
- Flush mount / Outdoor
- Outdoor device roof

**Certifications:**
- CE

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### Applications

<table>
<thead>
<tr>
<th></th>
<th>3D ENROLL</th>
<th>3D MINI HOME</th>
<th>3D TERMINAL</th>
<th>2D ENROLL</th>
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<td>Touchless, 3D-Multiview</td>
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<td>Optical Touch, FBI-certified</td>
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( ) = optional  
1 = outside of device  
2 = required if not sheltered
1D CARD STATION

RFID-Access and Time and Attendance as an alternative or an add-on to a biometric solution.

- Access control
- Basic Time & Attendance (In/Out)
- Flush mount in standard box
- Intuitive guidance by means of light ring
- Vandalism resistant

Terminal / Stations

USB
LAN/WAN
PC

Enroll Device

Terminals / Stations
### 1D CARD STATION

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**Applications**  
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<th>2D ENROLL</th>
<th>2D TERMINAL</th>
<th>2D STATION</th>
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<th>PIN</th>
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**Sensor**  
Touchless, 3D-Multiview  
Optical Touch, FBI-certified

**User Interface**  
5.0" Touchscreen  
3.5" Touchscreen  
RFID (•)  
PIN (•)  
Camera (•)  
Microphone •  
Speaker •  
Beeper •

**Biometrics**  
Identification (1:N)  
Verification (1:1)

**Database Capacity**  
20'000  
50'000  
50'000  
50'000  
50'000  
50'000

**Recommended Database for 1:N**  
•  
•  
•  
•  
•  
•

**FRR at FAR 1:100’000**  
<0.5%  
<2%  
<2%  
<2%  
<2%

**Standalone Capability**  
•  
•  
•  
•  
•  
•

**Communication**  
LAN (•)  
WLAN (•)  
USB (•)

**Interfaces**  
RS 232 / RS 485 (•)  
Wiegand (•)  
Relay Output (2)  
I/O (1/1)  
(2)

**Security**  
Liveness Detection (•)  
Multi-level Data Encryption (•)  
Template on Card (•)  
Anti-tampering / Silent Alarm (•)

**Conditions**  
Input Supply Voltage DC  
9–30V  
9–30V  
9–30V  
9–30V  
9–30V  
9–30V  
9–30V  
9–30V

Max. Power Rating  
20W  
25W  
15W  
10W  
10W  
10W  
10W  
5W

Operating Temperature in °C  
0–60  
-20–60  
0–60  
-20–60  
-20–60  
-20–60  
-20–60  
-20–60

Humidity 10–90%  
•  
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**Mounting**  
Wall mount (•)  
Flush mount / Outdoor (•)  
Outdoor device roof (•)  
Mounting (•)

**Certifications**  
CE (•)

( ) = optional  
1 = outside of device  
2 = required if not sheltered

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Components:
- 1D CARD STATION
- 1D ENROLL
- 1D TERMINAL
- 2D ENROLL
- 2D TERMINAL
- 2D STATION
- RFID
- PIN
- Camera
- Microphone
- Speaker
- Beeper
- LAN
- WLAN
- USB
- RS 232 / RS 485
- Wiegand
- Relay Output
- I/O
- Liveness Detection
- Multi-level Data Encryption
- Template on Card
- Anti-tampering / Silent Alarm
- Input Supply Voltage DC
- Max. Power Rating
- Operating Temperature
- Humidity
- Wall mount
- Flush mount / Outdoor
- Outdoor device roof
- CE

Touchless, 3D-Multiview
Optical Touch, FBI-certified

Specifications:
- 100 mm x 100 mm x 11 mm
- 58 mm x 11 mm
Indoor controller as an interface to a door lock, an alarm system or to other third-party systems.

- Various interfaces and I/O
- Easy mounting and wiring
### Specifications

#### Applications
- Access Control
- Time & Attendance
- Civil/Criminal

#### Sensor
- Touchless, 3D-Multiview
- Optical Touch, FBI-certified

#### User Interface
- 5.0" Touchscreen
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- RFID
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#### Biometrics
- Identification (1:N)
- Verification (1:1)
- Database Capacity 20/000
- Recommended Database for 1:N unlimited
- FRR at FAR 1:100'000 <0.5%
- Standalone Capability

#### Communication
- LAN
- WLAN
- USB

#### Interfaces
- RS 232 / RS 485
- Wiegand
- Relay Output
- I/O

#### Security
- Liveness Detection
- Multi-level Data Encryption
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#### Conditions
- Input Supply Voltage DC 5V
- USB 9–30V
- Max. Power Rating 20W
- Operating Temperature in °C 0–60
- Humidity 10–90%

#### Mounting
- Wall mount
- Flush mount / Outdoor
- Outdoor device roof

#### Certifications
- CE

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