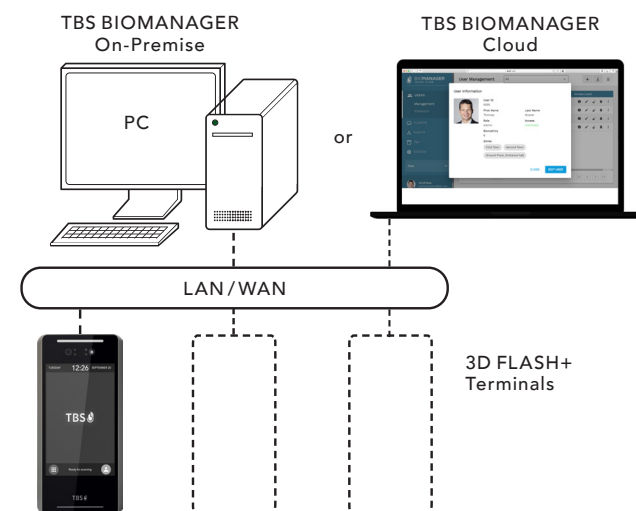




## 3D FLASH+

3D FLASH+ is the latest addition to the TBS family. Using powerful algorithms for facial recognition, it offers walk-through identification including anti-spoofing check.

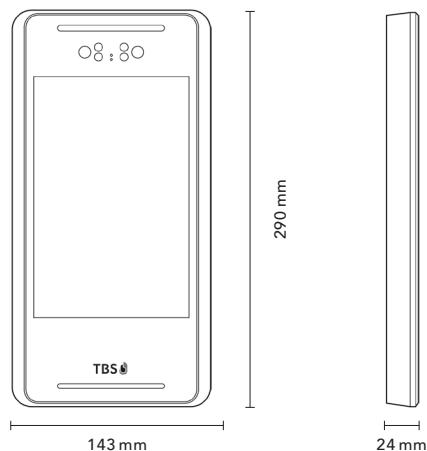
- Superior identification speed (< 1 second)
- Facial recognition distance configurable
- Built-in Anti-spoofing protection
- PIN code support, QR code reading
- RFID technologies:
  - HF: MIFARE Classic/DESFire (UID/CSN only)
  - LF: available, format support on request
- TBS MobileID support (requires Bluetooth module)
- Built-in enrollment directly on the reader (no tracking of persons that are not enrolled)
- Hygienic for sensitive applications in Access Control or Workforce Management
- Customizable touchscreen
- Wall mount for indoor installations
- Power supply included in package
- Optional fingerprint sensor add-on





### 3D FLASH+

Wall mount



- 1 = HF: MIFARE Classic/DESFire (UID/CSN only)  
LF: available, format support on request
- 2 = Fixed to MIFARE Classic/DESFire
- 3 = Extendable by license. Figure indicates single fingerprints, iris pairs or hands
- 4 = LTE FDD: B1/B3/B7/B8/B20/B28A  
WCDMA: B1/B8, GSM: B3/B8
- 5 = Either/or, selectable by switch
- 6 = Direct sunlight must be avoided
- 7 = Indoor use only
- 8 = Required if not sheltered
- (\*) = Optional, requires HW accessory or license

|                |  | 3D FLY  | 3D AIR (22) | 3D FLASH+      | 3D LIGHT (23)  | 2D IRON HEAVY DUTY | 2D IRON   | 2D SENSE       | 2D TIME | 2D MOVE        | TBS EDGE |
|----------------|--|---------|-------------|----------------|----------------|--------------------|-----------|----------------|---------|----------------|----------|
| Applications   | Access Control   | •       | •           | •              | •              | •                  | •         | •              |         |                | •        |
|                | Time & Attendance, Workforce Management                | •       | •           | •              | •              | •                  | •         | •              | •       | •              |          |
| Sensors        | Touchless Hand Scanner                                 | •       |             |                |                |                    |           |                |         |                |          |
|                | Touchless 3D Finger Scanner                            |         | •           |                |                |                    |           |                |         |                |          |
|                | Touchless Face Scanner                                 |         |             | •              | •              |                    |           |                |         |                |          |
|                | Touchless Iris Scanner                                 |         |             |                | •              |                    |           |                |         |                |          |
|                | Finger optical multispectral                           |         |             |                |                | •                  | •         |                |         |                |          |
|                | Finger optical (ot, optional) / capacitive (ct)        |         |             | (ot)           |                |                    |           | ct             | ct      | ct             |          |
|                | Thermal camera   |         |             |                | (*)            |                    |           |                |         |                |          |
| Identification | PIN  | •       | •           | •              | •              | •                  | •         | •              | •       | •              |          |
| Factors        | RFID   |         | (*)         | • <sup>1</sup> | • <sup>2</sup> | (*)                | (*)       | (*)            |         | • <sup>2</sup> |          |
|                | Mobile Access (Bluetooth)                              |         | (*)         | (*)            |                | (*)                | (*)       |                |         |                |          |
|                | QR Code  |         |             | (*)            | (*)            |                    |           |                |         |                |          |
| User Interface | Touchscreen size in inch                               | 7.0     | 5.0         | 8.0            | 5.0            | 5.0                | 5.0       | 3.5            | 9.0     | 7.0            |          |
|                | Loudspeaker  | •       | •           | •              | •              | •                  | •         |                |         |                |          |
|                | Beeper   |         |             |                |                |                    |           | •              |         |                |          |
| Biometrics     | Identification (1:N), database size limit <sup>3</sup> | 10'000  | 10'000      | 10'000         | 10'000         | 10'000             | 10'000    | 5'000          | 5'000   | 5'000          | special  |
|                | Verification (1:1), database size limit                | 100'000 | 100'000     | 100'000        | 100'000        | 100'000            | 100'000   | 100'000        | 100'000 | 100'000        | special  |
|                | FRR at FAR 1:100'000                                   | <0.5%   | <0.5%       | <0.5%          | <0.5%          | <1.0%              | <1.0%     | <2.0%          | <2.0%   | <2.0%          |          |
| Communication  | LAN  | •       | •           | •              | •              | •                  | •         | •              | •       |                | •        |
|                | Wifi   |         | (*)         |                | (*)            | (*)                | (*)       | (*)            | •       | •              |          |
|                | Mobile 4G <sup>4</sup>                                 |         |             |                |                |                    |           |                | •       | •              |          |
| Interfaces     | RS-232 and RS-485                                      | •       | •           | •              | •              | •                  | •         | • <sup>5</sup> |         |                | •        |
|                | Wiegand out  | •       | •           | •              | •              | •                  | •         | •              |         |                | •        |
|                | Relay (NO/NC/COM)                                      | 2       | 1           | 2              | 1              | 1                  | 1         | 1              |         |                | 2        |
|                | GPIN/GPOUT   | 2/2     | 2/2         | 2              | 2/0            | 2/2                | 2/2       | 3/1            |         |                | 2/2      |
| Security       | Liveness detection                                     |         | (*)         | •              |                | (*)                | (*)       |                |         |                |          |
|                | Multi-level data encryption                            | •       | •           | •              | •              | •                  | •         | •              | •       | •              | •        |
|                | Template on card                                       |         | (*)         |                |                | (*)                | (*)       | (*)            |         |                |          |
|                | Tamper Switch  |         | •           |                | •              | •                  | •         | (*)            |         |                |          |
| Installation   | Input supply voltage DC                                | 24      | 12-24       | 15-24          | 12-24          | 12-24              | 12-24     | 12-24          | 12      | USB            | 12-24    |
|                | Max. power rating in W                                 | 100     | 18          | 23             | 16             | 10                 | 10        | 5              | 10      |                | 15       |
|                | Power over Ethernet                                    |         | •           |                |                | •                  | •         |                |         |                |          |
|                | Operating temperature in °C <sup>6</sup>               | 0 to 45 | -20 to 60   | -20 to 60      | 0 to 45        | -20 to 60          | -20 to 60 | -20 to 60      | 0 to 35 | 0 to 35        | 0 to 45  |
| Mounting       | Wall mount WM-Box <sup>7</sup>                         |         | IP20        | IP54           | IP30           |                    | IP20      | IP20           | IP30    | (*)            | •        |
|                | Wall mount HD-Box                                      |         | IP54        |                |                | IP65               |           |                |         |                |          |
|                | Flush mount FM-Box                                     |         | IP54        |                |                |                    | IP54      | IP54           |         |                |          |
|                | Outdoor protection kit <sup>8</sup>                    |         | (*)         |                |                |                    | (*)       | (*)            |         |                |          |
| Certifications | CE   | •       | •           | •              | •              | •                  | •         | •              | •       | •              | •        |
|                | FCC/IC   | •       | •           | •              | •              | •                  | •         | •              |         |                | •        |
|                | UL 294   |         | •           |                |                | •                  | •         |                |         |                |          |

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