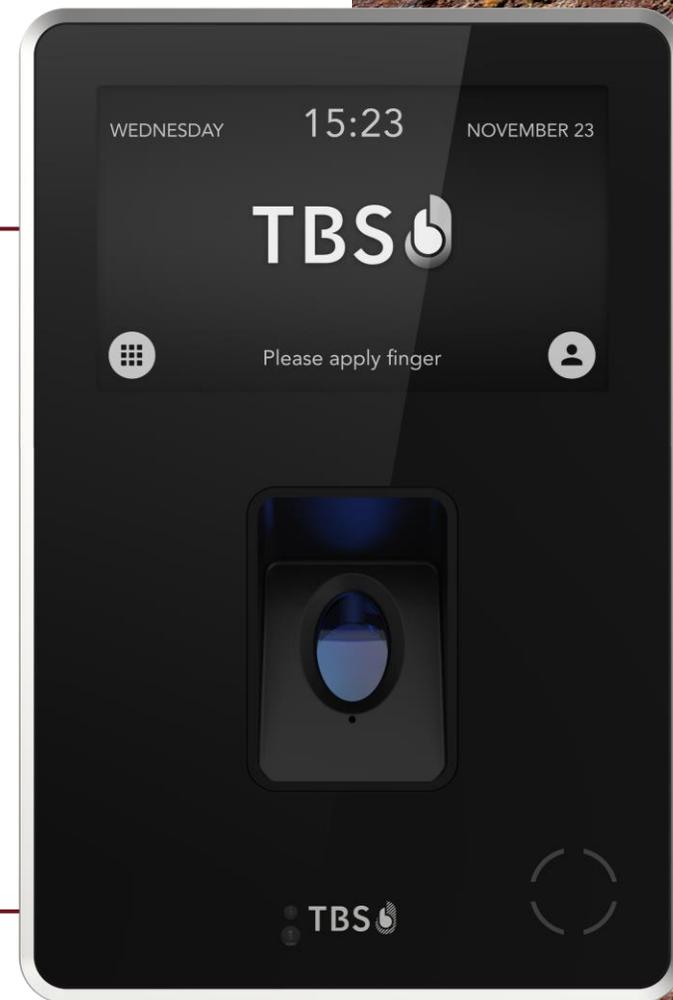


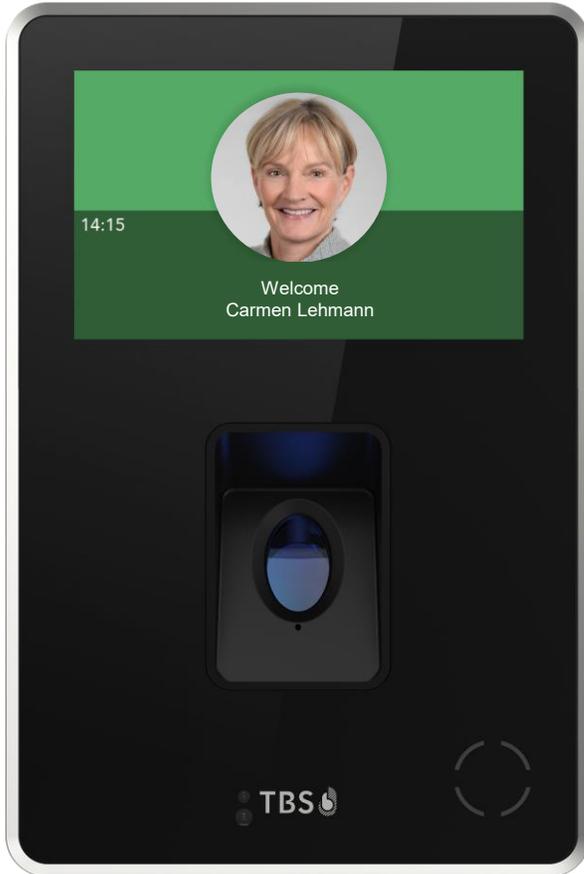
2D IRON



2D IRON



2D IRON combines a best-in-class multispectral fingerprint sensor with an IP65-Terminal for harsh environments. Designed and manufactured in Switzerland.



- (1) Multispectral fingerprint sensor with highest recognition performance
- (2) Robust Liveness Detection
- (3) Waterproof and dustproof (IP65)
- (4) Up to 50'000 users
- (5) 5-inch color touchscreen
- (6) Supports Power-over-Ethernet
- (7) PIN Code, Mobile ID
- (8) Various RFID options
- (9) Verification using combined ID factors
- (10) Easy setup of Time & Attendance buttons
- (11) Versatile configuration and customizing (customer workflows, user interface)
- (12) Manufactured in Switzerland

Fingerprint enrollment:

- (1) on 2D IRON using touchscreen
- (2) on 2D IRON using remote control
- (3) on 2D ENROLL USB sensor



DATASHEET 2D IRON



TECHNICAL SPECIFICATIONS

Category	Feature	Standard	Optional
Biometric Sensor	2D Fingerprint multispectral	•	
ID Factors	PIN	•	
	RFID		•
	TBS MobileID (Bluetooth)		•
User Interface	Touchscreen size	5"	
	Touchscreen Resolution	800 × 480	
	Loudspeaker	•	
Biometrics	Identification (1:N) database limit	10'000	50'000
	FRR at FAR 1:100'000	< 1.0%	
Communication	LAN	•	
	Wifi and/or BLE		•
Interfaces	RS-485 (OSDP) / RS-232	1 / 1	
	Wiegand out	1	
	Relay (NO/NC/COM, max. 60V/30W)	1	
	GPIN / GPOUT	2 / 2	
Security	Presentation Attack Detection (PAD)		•
	Tamper Switch	•	
Installation	Power supply rating	12 - 24 VDC	
	Max. power consumption	7 W	
	Power over Ethernet	•	
	Operating temperature	-20 to 60 °C	
	Operating humidity	10 to 90%	
	Wall mount or Flush mount box	•	
	Heavy Duty aluminum box (IP65)		•
Certifications	CE, FCC/IC, ISO 9001/14001, UL294	•	

ACCESSORIES & FEATURES

Hardware Extensions (optional):

- Integrated RFID reader
HF: MIFARE Classic/DESFire, HID iCLASS, LEGIC
LF: HID Prox, other formats on request
- TBS Door Controllers:
CONTROLLER LITE (2 relays, 2 GPIN/GPOUT, via RS-485)
CONTROLLER SMART+ (4 relays, 4 GPIN, 4 GPOUT, via RS-485 or LAN)

Software Extensions (licensed):

- Presentation Attack Detection (Live Finger Detection):
Power Package «High Security» required
- TBS MobileID: Power Package «Multi-Factor» required
- Extended Identification (1:N) limit with BIOMANAGER Premium Plan

Installation Options:

- Wall mount PVC box (IP20) for indoor installations
- Flush mount PVC box (IP54) for indoors and outdoors.
- Heavy Duty box (IP65, wall mount) for indoors and outdoors.
- Direct sunlight must be avoided. Outdoor protection kit is mandatory.

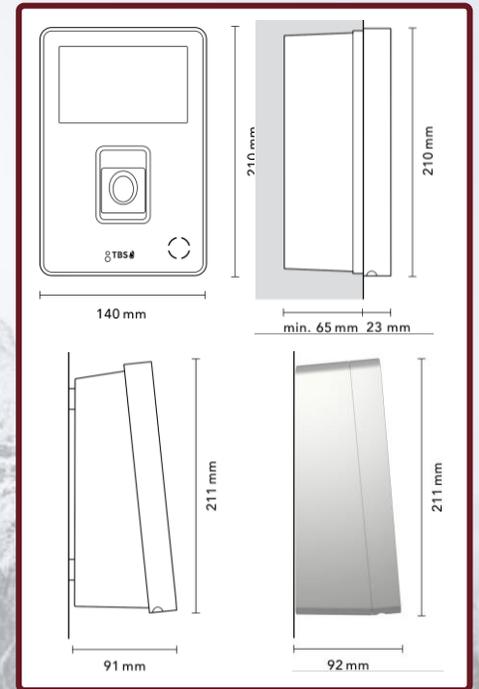
TBS System Security:

- Multi-level data encryption, with option to define a custom Template Encryption Key
- Protected communication channels (SSL) with option to use custom SSL certificates

Seamless Integration:

- Device connects to TBS BIOMANAGER Server hosted On-Premise or in the TBS Cloud
- Flexible integration options
 - REST APIs on system and device level available
 - Enrollment integration into 3rd party software supported

DIMENSIONS



CUSTOMIZING



MORE THAN JUST A READER

FIVE REASONS FOR YOUR CHOICE



(1) EUROPEAN COMPETENCE YOU CAN TRUST

Swiss perfection, German thoroughness and Czech ingenuity - built on integrity and reliability.

(2) TAILOR-MADE FOR DEMANDING CLIENTS

From the world's top-rated airport to the No.1 Department of Defence, TBS is the undisputed leader in bespoke solutions.

(3) ALL-IN-ONE PLATFORM

We deliver the full spectrum: multiple biometric technologies on one powerful platform, integrated with all major security providers.

(4) PARTNERSHIP BEYOND THE PROJECT

For us, winning a project is only the beginning. Long-term service & support is what truly separates the wheat from the chaff.

(5) THE VALUE OF A QUALITY INVESTMENT

More performance & flexibility – less risk

LET'S GET TO WORK



TRUST BIOMETRICS
SERVICES **COMPETENCE**
SPECIALIST FLEXIBILITY QUALITY
HOSPITALITY **T** **TERMINALS**
TRUST **B** BIOMANAGER
TOP-REFERENCES **S** SOFTWARE
SWISS **QUALITY**
DURABILITY RELIABILITY SERVICES **LONGTERM**
TOUCHLESS SECURITY
INTEGRITY MANUFACTURER COMPETENCE

