



Product Fact Sheet

Swissbit TSE 2.0

Certified fiscal security in
different form factors

Customer-facing short fact sheet based on the
Swissbit TSE product data sheet

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1 Overview

The Swissbit TSE 2.0 is a certified local Technical Security Device for electronic cash register systems in Germany. It combines secure transaction signing, protected local storage and industrial-grade SD card technology in a compact form factor.

2 Customer value & product summary

Customer benefit	Product capability	Why it matters
Certified local TSE	Compliance with BSI TR-03153 requirements	Supports German fiscalization requirements for POS environments.
Secure fiscal records	Cryptographically secured and digitally signed transaction storage	Creates tamper-evident records for audit-relevant transactions.
Compact integration	Standard SD card form factor, SDHC / SD 3.0 support	Fits POS terminals and embedded systems with SD interfaces.
Operational scalability	Multi-client capability and parallel transaction processing	Suitable for modern POS architectures and multiple POS clients.

2.1 Best-fit use cases

- POS terminals and embedded fiscal devices requiring a local TSE option.
- Retail, hospitality and service environments subject to German fiscalization.
- System integrators and POS vendors needing a compact, hardware-based TSE.

3 Fiscal compliance & security

The SD TSE 2.0 focuses on the security functions that matter most for compliant POS operation: signed transaction records, protected storage, defined roles and controlled export procedures.

Area	Customer-relevant capability
Compliance basis	Designed for BSI TR-03153-1 V1.1.1 requirements.
Transaction protection	Cryptographically secured and digitally signed transaction storage.
Tamper evidence	Sequential storage of fiscal data with tamper-evident structure.
Access model	Role-based access control for Admin, TimeAdmin and Logger roles.
Export	Controlled export of stored data as TR-03153-1 compliant TAR archives.
Deletion and updates	Deletion and firmware updates follow defined TR-03153 procedures.

3.1 Supported TSE profile capabilities – condensed

- Local storage profile with approximately 6.5 GB TSE storage area.
- Local Secure Element with 384-bit ECDSA signature capability.
- Up to 100 clients and parallel transaction processing for POS use cases.
- Vendor-specific integration interfaces for platforms such as Android, Linux, Windows, Java and embedded environments.

4 Reliability & operating profile

The product combines standard SD card integration with robust flash management, industrial operating conditions and defined retention characteristics.

Parameter	Summary
Form factor	Standard SD memory card, 32.0 x 24.0 x 2.1 mm, approx. 2 g.
Capacity	8 GB total memory; 6.5 GB TSE storage area.
Temperature	Extended operating range from -25°C to +85°C.
Reliability	MTBF greater than 6,000,000 hours at 25°C.
Cryptographic use	20 million supported cryptographic signatures / reliable key usages.
Data retention	Up to 10 years at beginning of life under specified usage and storage conditions.

5 Ordering & integration positioning

Commercial topic	Customer-facing message
Standard capacity	8 GBytes.
Part number	SFSD008GL1PT1TB-E-5E-E3P-TE1.
Certificate validity	Product options up to 7 years; default configuration 5 years plus logistics buffer.
Positioning statement	Certified local TSE solution for secure fiscal signing, protected storage and controlled export in German POS environments.

Source basis: condensed from the Swissbit SD TSE Product Data Sheet, pages 1–8. Detailed electrical pinouts, register descriptions, part-number decoding, export control and software licensing sections are intentionally excluded from this customer-facing fact sheet.

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