

Reliable Solutions for Every POS System in Germany

Diebold Nixdorf has introduced a technical security device for POS systems in Germany. Referred to as TSE (from the German name “Technische Sicherheitseinrichtung”), it is available in various versions so that it can be integrated with different types of POS hardware and software. The device comes with a high level of availability, is easy to integrate and complies with all legal requirements.

Available and Universal

Diebold Nixdorf TSE solutions are fully compliant with the requirements of the German KassenSichV, and are certified under the BSI certification number BSI-K-TR-0393-2020. Retailers can choose from three different solutions:

- **TSE-Embedded** is designed for integration into modular BEETLE systems and is simply plugged into the new Retail Card. Because it is installed in the POS system, there is a high level of access protection.
- **TSE-USB** is in the familiar shape of a USB stick, and can be connected to all-in-one systems such as the BEETLE /iPOS. In many cases, it is also possible to use it with third-party POS systems following successful testing.
- **TSE-Connect-Box** is a server rack or back-office solution for the entire store and therefore not connected directly to a POS system. Inside the TSE-Connect-Box, there are a number of TSEs, typically fewer than the number of POS systems at the store. A connection is established via the network interface. The TSE-Connect-Box can also be used to fiscalize tablets with different operating systems. In addition to POS systems and tablets, Diebold Nixdorf TSE is also compatible with self-checkout systems and kiosk solutions.



Reliable and Durable

Diebold Nixdorf TSE is not dependent on the availability and performance of external cables. It is located close to the POS system within the store, ensuring that the TSE solution is reliable and highly available. TSE is produced at a TS 16949-certified factory. Its design guarantees long-term use and secure data retention for 10 years after decommissioning. The standard certificate validity of three years would require regular TSE replacements in the store. Here lies another advantage of Diebold Nixdorf TSE. Depending on the model, the certificate is valid for 5 or 7 years. This not only results in longer intervals between installations, but also significantly reduces the average monthly costs of a TSE over its service life.

Easy to Integrate

TSE is a platform-independent solution that does not rely on operating system or compiler-dependent libraries. Its integration is therefore not only less time-consuming, but also possible on almost all current POS platforms. Diebold Nixdorf TSE is connected via a Web service with a JSON interface. Asynchronous communication allows commands to be processed quickly and status messages to be exchanged at any time. JSON commands are also used to export data to TAR files. No matter which TSE solution is used, the software interface remains the same. Mixed configurations, such as TSE-USB in small stores and the TSE-Connect-Box in large stores, are thus no problem.

Properties

USER BENEFITS

- Different solutions depending on the type of POS system – but only one software interface
- Data retention in the store, export to central archive possible
- Long service life

Technical data

TSE-USB, TSE-Embedded and TSE-Card

- Security module, memory module and digital interface in one unit
- TR-03153-, BSI-PP-SMEARS- and CSP (BSI-PP-CSP)-certified or with provisional operating permit by the Federal Office for Information Security (BSI)
- 10 million signatures (typ. 5 million receipts in retail, application-dependent)
- Certificate valid for 5 or 7 years, depending on the model
- Data retention time of 10 years after decommissioning when stored between 10°C and 30°C
- Key length: 384 bits
- Transaction time: <250 ms
- Maximum number of parallel transactions: 512

- Fiscal memory for transaction data: 6.5 GB
- Form factor: type A USB stick (TSE-USB) or internal USB module (TSE-Embedded) or µSD card (TSE-Card for TSE-Connect-Box)
- Dimensions TSE-USB stick:
 - 16.55 x 8.3 x 46.1 mm [WxHxD] with type A USB connector
 - 16.55 x 8.3 x 34.1 mm [WxHxD] without type A USB connector
- Certification number: BSI-K-TR-0393-2020

- Including external power supply unit 230V primary
- Power consumption (7 TSE-Card slots) < 20 W primary
- Dimensions: 350.4 x 44.5 x 157 mm standalone (without power supply unit holder)
- Dimensions: 482.6 x 44.5 x 227.4 mm [WxHxD]
- 1 HU 19" rack mount (with power supply unit holder)
- Weight: approx. 2 kg (basic model, without power supply unit)

TSE-Connect-Box

- TSE sharing across multiple POS systems (up to 32 POS systems on one TSE-Connect-Box)
- 19" rack mount 1 HU
- Can also be set up as standalone box without rack mount
- 7 (optionally 14) slots for Diebold Nixdorf TSE-Card
- Network interface 1000Base-T
- Status indication via LEDs
- Remote firmware update supported
- Remote monitoring (optional service) supported
 - Factory reset button to restore the box to its default settings
- Type A USB slot can optionally be used to configure the TSE-Connect-Box

