

Certificate

TUVIT
TÜV NORD GROUP

EN50600

Infrastructure
2023
tuvit.de ID: 66998.23

The certification body of TÜV Informationstechnik GmbH hereby awards this certificate to the company

T-Systems International GmbH Hahnstraße 43 60528 Frankfurt am Main, Germany

Certificate validity: 2023-09-25 - 2025-09-25

to confirm that its security area

Data Center Campus Magdeburg

fulfils all requirements of

EN 50600 Availability Class 3, Protection Classes 1-4, Granularity Level 2

using the criteria catalogue TSI.EN50600 V2.0 of TÜV Informationstechnik GmbH. The requirements are summarized in the appendix to the certificate.

The appendix is part of the certificate with the ID 66998.23 and consists of 3 pages.

Essen, 2023-09-25

Dr. Christoph Sutter, Head of Certification Body

TÜV Informationstechnik GmbH Am TÜV 1 • 45307 Essen, Germany tuvit.de



Certification scheme

The certification body of TÜV Informationstechnik GmbH performs its certifications based on the following certification scheme:

 German document: "Zertifizierungsprogramm (nicht akkreditierter Bereich) der Zertifizierungsstelle der TÜV Informationstechnik GmbH", version 1.1 as of 2020-03-01, TÜV Informationstechnik GmbH

Evaluation report

■ German document: "Evaluation Report – TSI.EN50600, Data Center Campus Magdeburg", Version 1.0 as of 2023-09-19, TÜV Informationstechnik GmbH"

Evaluation requirements

The Evaluation Requirements are defined in the following standards:

- EN 50600-1, Information Technology Data centre facilities and infrastructures Part 1: General concepts; German version EN 50600-1:2019-08
- EN 50600-2-1, Information Technology Data centre facilities and infrastructures Part 2-1: Building construction; German version EN 50600-2-1:2014-09
- EN 50600-2-2, Information Technology Data centre facilities and infrastructures Part 2-2: Power supply and distribution; German version EN 50600-2-2:2019-08
- EN 50600-2-3, Information Technology Data centre facilities and infrastructures Part 2-3: Environmental control; German version EN 50600-2-3:2019-08
- EN 50600-2-4, Information Technology Data centre facilities and infrastructures Part 2-4: Telecommunications cabling infrastructure; German version EN 50600-2-4:2015-07
- EN 50600-2-5, Information Technology Data centre facilities and infrastructures Part 2-5: Security systems; German version EN 50600-2-5:2016-08
- EN 50600-3-1, Information Technology Data centre facilities and infrastructures Part 3-1: Management and operational information; German version EN 50600-3-1:2016-08

and were checked applying the evaluation requirements:

■ "TSI.EN50600 Criteria Catalogue, TSI.EN50600 Version 2.0" as of 2020-04-01, TÜV Informationstechnik GmbH

Evaluation target

Evaluation target is the security area "Data Center Campus Magdeburg" of T-Systems International GmbH. It is detailed in the evaluation report.

Evaluation result

The evaluation target fulfils all applicable requirements of the above-mentioned standards with regard to

- Availability Class 3,
- Protection Classes 1-4,
- Granularity Level 2.

Summary of the Evaluation Requirements

The EN 50600 defines requirements for a data center in the following areas:

- Building construction,
- Power distribution,
- Environmental control,
- Telecommunications cabling infrastructure,
- Security systems,
- Management and operation.

To classify a data center, four availability classes, four protection classes and three levels of granularity for energy monitoring are defined.

Availability Classes

In EN 50600-2-2/-2-3/-2-4 four different grades of availability classes are defined for the entirety of all facilities and infrastructures of the data center. The availability classes have the following characteristics, among others:

- AC1 Single path layout,
- AC2 Single path layout with redundancies,
- AC3 Multi-path design, solution for repair during operation,
- AC4 Multi-path design, fault tolerant except during maintenance.

Protection Classes

Four different protection classes are defined. A protection class is assigned to all areas and supply paths of the data center. They describe physical protection against the following events:

- unauthorized access,
- internal environmental events,
- external environmental events.

With regard to unauthorized access, at least three protection classes must be implemented.

Granularity levels for the measurement of energy consumption

Three levels of granularity are defined for the measurement:

- Level 1: a measuring concept that provides simple, general information for the entire data center.
- Level 2: a measuring concept that provides detailed information for specific facilities and infrastructures within the data center.
- Level 3: a measuring concept that provides granular data for the systems within the areas and supply paths of the data center.