Swisscom Ltd

Wankdorf Data Centre Stauffacherstrasse 59 3015 Berne www.swisscom.ch

Swisscom Wankdorf data centre

swisscom

For a successful future



Swisscom data centre Wankdorf was built in response to the increasing digitisation of society and the resulting growth in data traffic. With one of the most modern data centres in Switzerland, Swisscom is setting new standards of energy efficiency, reliability and data availability. All data is stored in *Switzerland. Swisscom offers businesses* new opportunities, including stable infrastructure, cloud services, big data, Internet of Things and machine-tomachine solutions. The Wankdorf data centre is the core of a successful future for our clients: highly available, secure, sustainable, innovative and stable.



At a glance

one of Europe's most modern data centres

Expandable server area of up to

4000 m²

High data availability with

Tier level IV certification

Innovative, accurate recirculated air cooling system including evaporation cooling

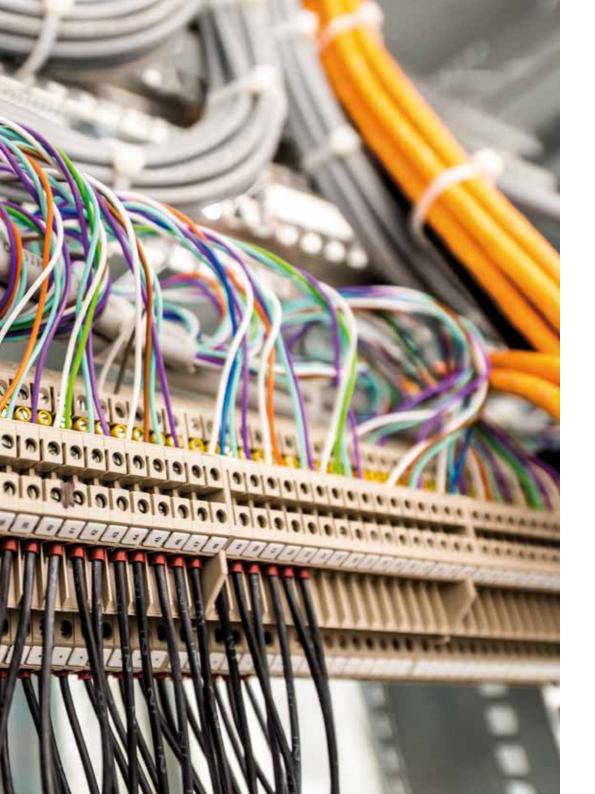
Top energy use rating PUE = 1.2!

Connection with data centre guarantees

business continuity

Uninterrupted power supply with

no-break units



Security

High availability: reliability is the top priority

The Wankdorf data centre sets new standards for reliability and data availability. All data remains in Switzerland. The data centre has Tier level IV certification.

Swisscom guarantees:

Operational IT systems, including during power interruptions (planned and/or unplanned), thanks to redundant, fault-tolerant equipment on all supply chains

- > Power supply and distribution
- > Ventilation, cooling and air conditioning
- > Measurement, control and regulation systems

Redundant network connections for data centre and client network connections

High reactivity to technological changes, in particular for power supply and air conditioning systems

Protection and security, compliance

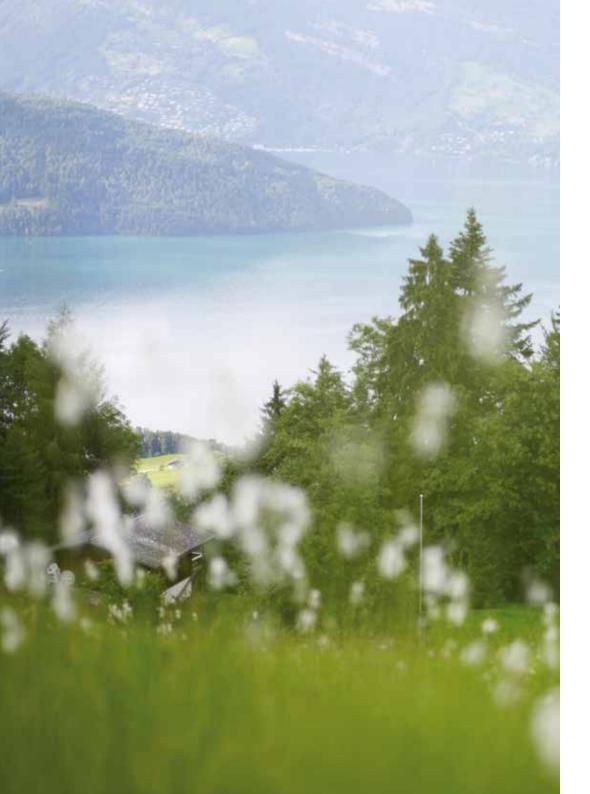
- > Protection from natural events such as earthquakes, floods and lightning strikes
- > Different security zones with separate personal access rights
- > Staff on site at all times for an immediate response

Organisation

> Optimised processes between IT and infrastructure operators

As well as physical data protection, a strictly regulated access system and an earthquake-proof location, all servers and applications are constantly monitored by the Operation Control Centre in Ittigen.

Thanks to redundant data storage through the mirroring of systems and applications in a second data centre, data availability remains at almost 100% if the power supply is interrupted.



Sustainability

Swisscom is one of the top ten electricity purchasers in Switzerland. All our electricity comes from local **renewable energy sources** and we purchase more wind and solar energy than any other company in Switzerland. We require our suppliers to meet high environmental and social standards.

Our clearly defined **corporate responsibility strategy** sets high sustainability standards for the Wankdorf data centre. The building is cooled using fresh air and rainwater rather than conventional power-hungry cooling equipment. Waste heat is fed into the city of Berne's heating network and can be used to heat nearby homes. The innovative emergency power supply system means batteries are no longer needed and guarantees an uninterrupted, efficient power supply to the servers. Thanks to these measures, the Wankdorf data centre has a top energy usage rating.

The **Power Usage Effectiveness (PUE) value is at 1.2**. Cooling and power supply account for only 20% of the energy consumed by the servers. These efficiency measures have been certified and approved by PUEDA, the Federal Department of Energy's data centre energy efficiency programme.

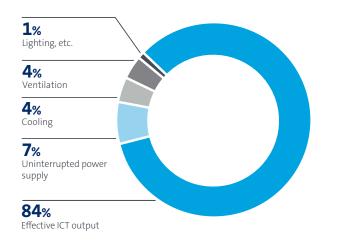
With this concept we enable our clients to realize energy savings. According to a study certified by the myclimate foundation, using cloud-based IT services reduces energy consumption by up to 90% compared to the use of individual servers. Bundling IT services for a large number of companies in energy-efficient data centres is therefore an effective strategy for increasing energy efficiency in Switzerland.



Facts and figures

The Wankdorf data centre has some remarkable features, including an excellent efficiency factor, a modular structure and a state-of-the-art cooling system. Here are the key facts and figures.

- > Four modules with an effective output of 600 kW each
- > Efficiency factor: 84% (PUE*=1.2) (European average: 51% (PUE=2)
- > State-of-the-art hybrid cooling system with evaporation cooling using rainwater
- > 100% of waste heat used to heat nearby homes
- > Uninterrupted power supply with no-break units
- > Guaranteed business continuity thanks to links with ultra-modern data centre
- > Outstanding availability with Tier level IV certification
- > Expandable to seven modules, according to requirements
- > Storage media never leave the building, but are destroyed in the building



Certifications

Highly acclaimed

The Wankdorf data centre meets all the latest standards.











Cloud computing is up to 90% more environmentally friendly than the use of inhouse servers. Swisscom's cloud computing services use 100% renewable energy.

www.swisscom.ch/myclimate

* Power Usage Effectiveness is the ratio of total energy used to the energy used by IT equipment.