YOUR DATA CENTRE SECURITY

Certified physical security of the ICT infrastructure of data centres

SYPROS

MADE IN EUROPE
EU
100% QUALITY ACCREDITATION

SYPROS

We provide professional consultation in the fields of physical and technical security of data centres, preparation of feasibility studies and subsequent project documentation.

We specialise in full project management for the provision and implementation of secure data centre constructions and Non-IT infrastructure. Full warranty and post-warranty service is provided, including SLA and 24/7 monitoring centre services.

The solutions proposed and delivered by us meet the maximum requirements for technical and physical security of ICT systems and sensitive data:

Requirements of ENISA/EU Agency for Cybersecurity.

EU law 2016/679 - GDPR
(The General Data Protection Regulation).

Directive of the European Parliament and of the Council 2016/1148 NIS 2 on measures to ensure a high common level of security of networks and information systems in the European Union.

European standard EN 50600 for planning, construction and operation of data centres.

Reliability and security of Tier ready modular data centres (according to UPTIME).

COMPLETE SYSTEM TESTS AND CERTIFICATION - YOUR GUARANTEE OF SECURITY:

SYSTEM-TESTED

DC-IT Security room

For the maximum elimination of all physical threats and the preservation of maximum availability of ICT systems and sensitive data, a unique certified security room-in-room solution was developed.

Multifunctional certified protection guarantees security against fire and the subsequent rise in temperature of the protected space, penetration of gushing and partially stagnant water, penetration of aggressive gases, unauthorized access, electromagnetic field influence and mechanical damage even in the event of an explosion.
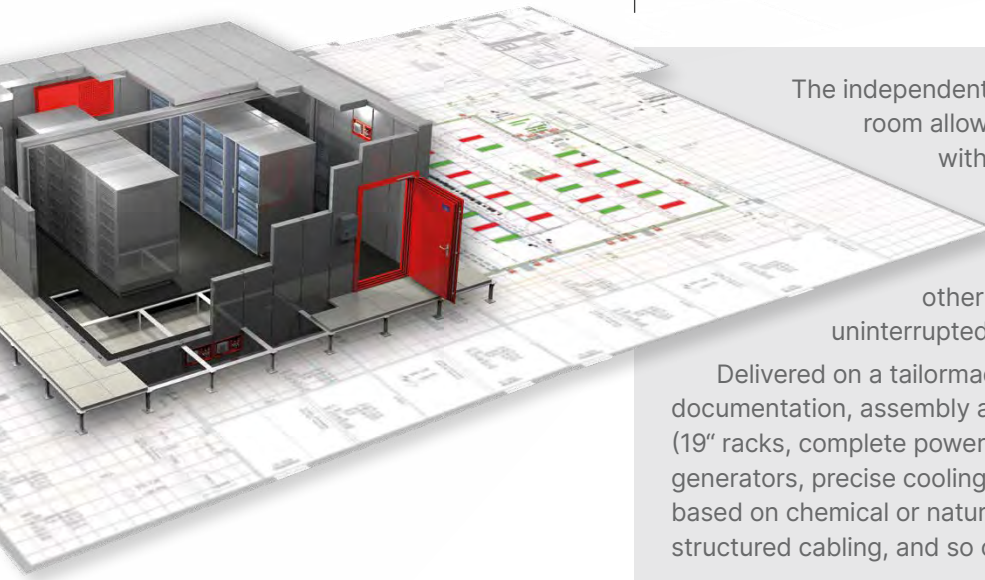
The independent modular design of the data security room allows installation in any interior space without the need for structural modifications. The flexibility and modularity of the security data room system enables future expansion or relocation to other premises, or even assembly during uninterrupted operation of ICT systems.

Delivered on a tailormade basis including the full project documentation, assembly and installation of optional technologies (19" racks, complete power system including UPS systems and diesel generators, precise cooling systems, fire extinguishing systems based on chemical or natural gases, access and camera systems, structured cabling, and so on).

APPLICATION

Critical data centres and security archives of important digital media and paper documents in the public sector (ministries, state offices, police and army, hospitals, universities), the banking sector, industrial production, energetics, and so on.

MAIN SAFETY PARAMETERS AND CERTIFICATIONS:

- Fire resistance to quality class R60D to EN 1047-2, system-tested.
- Fire protection 120 or 180 minutes as per EN 13501-2/EN 1363-1.
- Break-in protection RC3-Certified as per EN 1627/1630.
- Explosion resistance EXR 3 as per EN 13123-2/EN 13124-2.
- Flue gas impermeability as per EN 1634-3.
- Dust and water impermeability IP 56 as per EN 60529.
- Resistance to debris as per EN 1047-2.
- EMC-protection as per 50147-1.
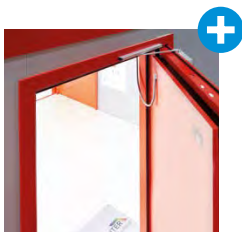
DC-IT Shielding

„Data Centre IT Shielding" solutions for protection against natural influences (e.g. lightning) and EMP attacks (electromagnetic impulses). Shielding with high frequency sheathing helps defend against EMP threats for complete rooms and ICT systems.
The solution is precisely tailored to the individual needs of the customer.
DC-IT Shielding offers the right room shielding solution for every security room, outdoor container, SCIF room and ICT infrastructure as required.

Interception of sensitive data is impossible, because the radiation of computers cannot penetrate to the outside.

A **high-frequency outer shell** encloses the racks to be protected as a protective shield against external electromagnetic interference.

EMP
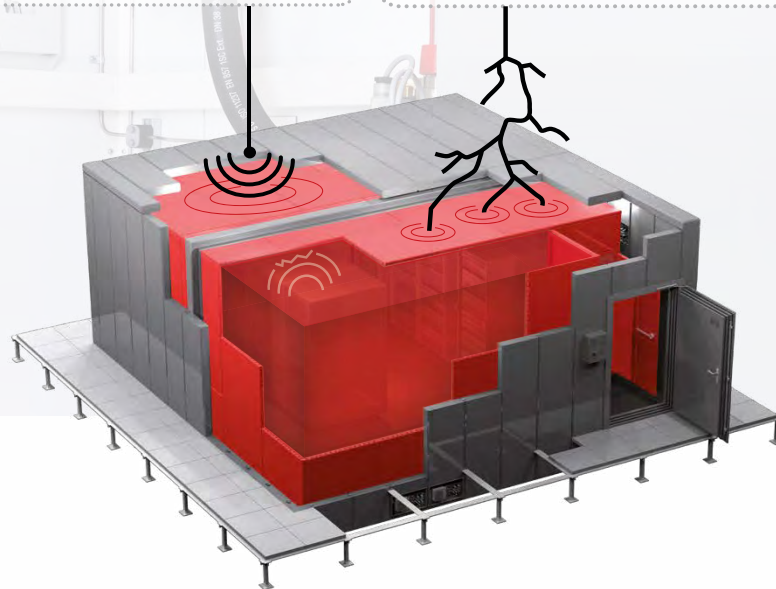
TECHNICAL DATA

- Interception and radiation shielding up to 60, 80 or 120 dB.

- Compliance with requirements of Tempest, NSA 65-2, IEEE 299, NATO standard.

- Guaranteed shielding attenuation levels up to 40 GHz.

- Modular design made of steel sheet metal elements.

- System-tested acc. to EN 50147-1, NSA 65-6, IEEE-STD 299 (MIL-STD 285).

- BSI-compliant (BSI: German Federal Office for Information Security).

RELIABLE PROTECTION AGAINST:

| Natural influences | Espionage | Data theft | Technical eavesdropping attacks | Electronic attacks |

Autonomous Ultra Safe Mil-IT-ary DC-ITContainer

Outdoor data centre in a mobile container all-in-one design with the maximum system-certified level of physical security.
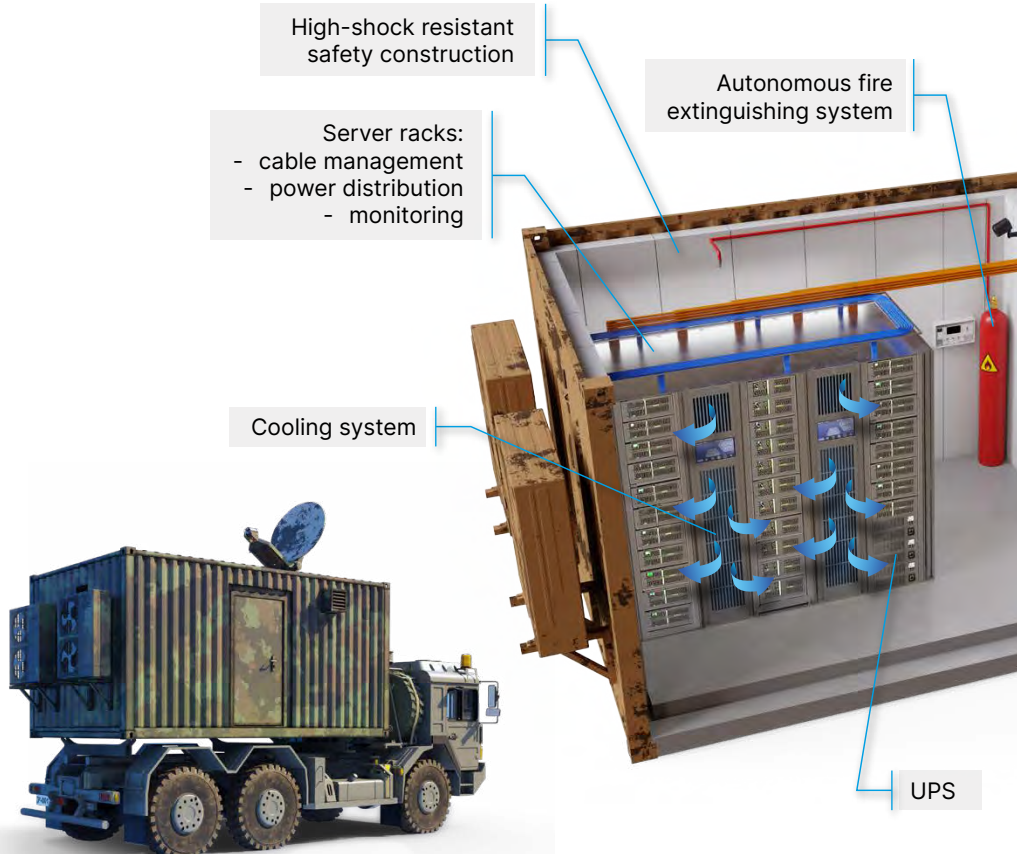
The solution is fully equipped with a power supply system including a UPS and an autonomous motorgenerator, a redundant cooling system, server racks including accessories and structured cabling, a stable fire extinguishing system and other security systems for independent and highly available ICT operation.

Combined with satellite data transmission it can be located and operated in any location. The independence of the solution allows immediate relocation if necessary.

SYSTEM-TESTED

RESISTANT AGAINST
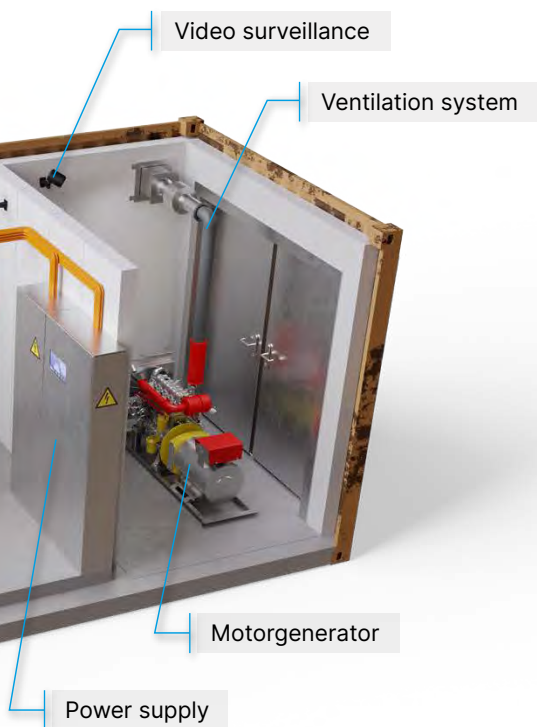
EMC

RC3

Ballistics

Debris fall/ Impact

Water

Dust

Gases

Fire

High-shock resistant safety construction

Autonomous fire extinguishing system

Server racks:
- cable management
- power distribution
- monitoring

Cooling system

UPS

Autonomous Ultra Safe
Mil-IT-ary DC-ITContainer

Video surveillance

Ventilation system

Motorgenerator

Power supply

Technical data	DC-ITContainer ITC 20	DC-ITContainer ITC 40	DC-ITContainer Granite 20 and 40
MAIN PROTECTIVE PROPERTIES			
Fire protection	EI90/F90	EI90/F90	R60D as per EN 1047-2 and EI180
Burglary protection	RC3 (RC4 on request)	RC3 (RC4 on request)	RC3 (RC4 on request)
Dust and waterproof IP56 as per EN 60529	√	√	√
Smoke tightness according to EN 1634-3	√	√	√
Odolnost proti výbuchu podle EN 13123-2/EN 13124-2	•	•	EXR 3

SYPROS

DC-ITContainer Outdoor Data Centre

The outdoor data centre in a mobile container all-in-one design is fully equipped with a power supply system, including UPS, cooling system, server racks including accessories and structured cabling, fire extinguishing system and other security systems for immediate ICT start-up.

In addition to cooling and power system redundancy and compliance with Tier / EN50600, for high ICT availability, the container solution can be delivered in the maximum system-certified level of physical security or shielding.


Technical data	DC-ITContainer ITC 20	DC-ITContainer ITC 40	DC-ITContainer Granite 20 and 40
Lenght (external/internal)	6.058 / 5.420 mm	12.192 / 11.550 mm	6.085 / 5.330 mm or 12.192 / 11.460 mm
Width (external/internal)	2.438 / 2.140 mm	2.438 / 2.140 mm	2.438 / 2.040 mm
Height (external/internal)	2.896 / 2.550 mm	2.896 / 2.550 mm	2.896 / 2.440 mm
Number of 19" rack systems for IT and technology, 43 HU, 600×1000 mm (WxD)	max. 6	max. 16	max. 16
Cooling system (redundancy 100 %)	2 front outdoor units	2-4 front outdoor units	2 or 2-4 front outdoor units
UPS	√	√	√
Early fire detection and extinguishing system	√	√	√
Complete electrical distribution	√	√	√
Pressure relief valve	√	√	√

APPLICATION ● ● ●

Army, the public sector, research, energetics, mining industry, and so on.
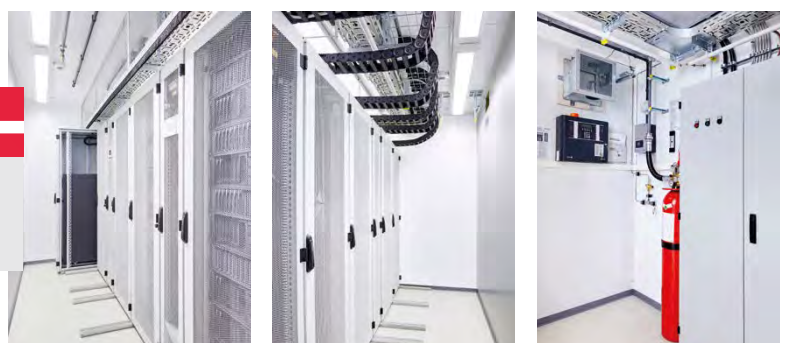
DC-ITSafe
Micro-Data-Centre
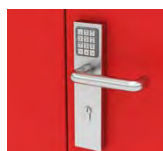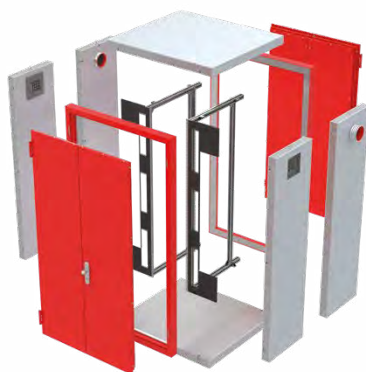
Decentralized ICT systems can be secured with a complete micro data centre - modular DC-ITSafe with a height of 42/47U, or a compact plug-and-safe with a usable height of 21/31U.

This solution enables the protection of 19" technologies against all physical risks (fire, water, dust, gases, burglary, mechanical damage and explosion) and is equipped with its own air conditioning unit with the possibility of redundancy, fire extinguishing system and constant remote monitoring of internal environment parameters (temperature, humidity, access). The modular system also allows it to be expanded with interlinked modules, or to be moved to other locations.

Technical data	DC-ITSafe Mini	DC-ITSafe Compact	DC-ITSafe 56/62 U
EXTERNAL DIMENSIONS			
Width (mm)	790	790	1.452
Height (mm)	1.672	1.960	2.185 / 2.425
Depth (mm)	1.200	1.530	1.470
Profile frame (mm)	700 × 900	700 × 800	800 × 1 200
RACK UNIT			
Horizontal (U)	-	29	44 / 50
Vertical (U)	-	2	12
Total height units number (U)	21	31	56 / 62
WEIGHT			
Tare weight (kg)	cca. 500	cca. 850	cca. 1.100
Max. load capacity in 19" rack (kg)			1 000
EQUIQMENT / CONFIGURATION			
Patented mounting technology	•	•	√
Self-locking automatic multipoint locking system	√	√	√
Number of soft bulkheads (optionally hard bulkhead or fire protection sleeves)	2	2	4
Early fire detection and extinguishing system	√	√	√
Monitoring	√	√	√
Access control	Key lock with profile half cylinder, PIN keypad lock and profile half cylinder, Code card lock / code card fitting, 2-factor authentication.		

DC-ITSafe Mini (21 U)

DC-ITSafe Compact (31 U)

DC-ITSafe (56/62 U)

APPLICATION

Decentralized data centres in the public sector (branches of ministries, state offices and city districts), police and army offices, banking institutes, healthcare, industrial halls - industry 4.0, ICT, telecommunications, energetics, oil and product pipelines, and so on.

DC-IT Monitoring/ Surveillance Centre

Analysis, monitoring and evaluation of alarms and energy data to increase the availability and efficiency of ICT infrastructure.

A constant view of the data centre shows not only its operational status, but also prevents unpredictable failures, increased energy consumption and unnecessary costs. Data centre monitoring selectively evaluates individual systems, comprehensively and continuously analyses DC infrastructure such as cooling systems, power supply, UPS systems, PDUs and more. It analyses and visualises the content of the data and, if necessary, alerts the responsible persons.

We provide 365/24/7 remote monitoring for the continuous security of your data centre with the possibility of a managed service for your functional and secure network.
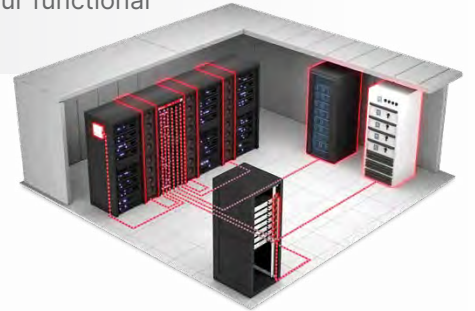
DC-IT DataSafes

Guarantee of safe storage of electronic data and important documents according to legal requirements.

The data safe protects with its certified resistance against serious losses of existential data and documents, in compliance with companies legally regulated provisions on the protection and security of backed-up data.

Certified fire resistance of 120 minutes including level II. security classes against burglary, optional interior equipment (fixed shelves, pull-out shelves with dividers, internal lockable box) and locking equipment (mechanical lock, electronic combination lock).

SYPROS

Our team is composed of qualified experts with vast experience gained over more than 20 years in the field of ICT, especially in the markets of Central and Eastern Europe, the Middle East and Asia.

We supply and deliver tailormade certified products to the highest European quality standards. Our portfolio primarily represents professional solutions for complete secure data centres including non-IT infrastructure.

www.sypros.cz