RZproducts
We protect IT

DC-ITContainer

Mobile. Flexible. Ready for operation.

MADE IN GERMANY

Division of the
DATA CENTER
GROUP

Designed to withstand even the toughest environments.

Avoid a lack of space and act economically at the same time – impossible? It is possible!

In times of rapidly growing amounts of data, you often face a lack of space in IT-surroundings. Our solution is the modular DC-ITContainer. Available in a 20 ft or 40 ft design, the ISO-container is constructed to withstand even the toughest environments. The robust and entirely welded container construction qualifies as a durable solution, e.g. in production halls or out in the open. It withstands everything. It also qualifies as an interim solution that can be transported easily and is therefore always flexible and mobile.

Moreover, the DC-ITContainer is a plug & play solution: Quickly connected to the power supply after the delivery, it is ready for operation. Hence, the time between order and initial operation is significantly shorter than for a conventional data center. On top of that, the process is much cleaner: There are no on site adjustments

necessary – there just has to be enough space for the respective statics of the container.

The DC-ITContainer is also suitable for the setup of edge-infrastructures, e.g. at production sites. Why? Because the demand for turnkey-ready data center solutions, that are modular, secure and highly-available, keeps on growing, especially in times of digitalization and growing automation. Consequently, they can be realized flexibly and in a timely manner.

THE BENEFITS OF THE MOBILE DC-ITCONTAINER

The DC-ITContainer protects from dust, debris, fire, rain, extinguishing water and unauthorized access. The use is so flexible that you can put it inside or outside or shift quickly from one to the other, whichever way you need it.

Moreover, the DC-ITContainer contains great features like warm and cold aisles, movable racks, energy efficient cooling, a UPS-system and, optionally, a DC-MonIToring Agent for the IT and the transfer of fault messages.

PROTECTION AGAINST

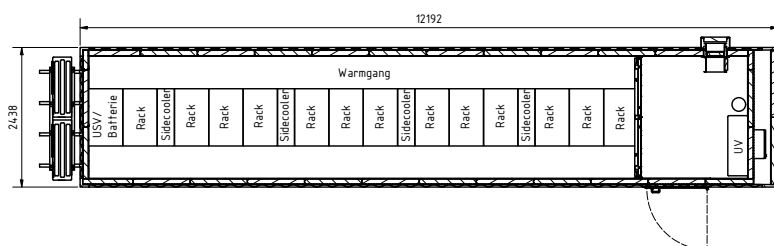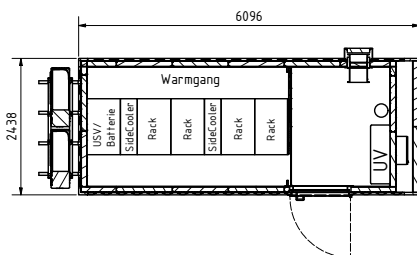| Fire | Extinguishing water | Explosion | Corrosive gases | Debris | Vandalism | Noise | Dust | Unauthorized access | Eavesdropping / radiation |

Configuration Example
DC-ITContainer ITC 20

1	Cooling System	**5**	UPS
2	Cable Sealing	**6**	Early Fire Detection / Extinguishing System
3	19″ IT-Rack	**7**	Excess Pressure Flap
4	Side Coolers	**8**	Electrical Subdistribution Unit

CERTIFIED QUALITY – "MADE IN GERMANY"

The DC-ITContainer is available in two standard sizes and two fire safety levels that impress with the classic "Made in Germany" quality. In case of the DC-ITContainer FLEX, the dimensions may vary depending on the customer's requirements. All designs offer great security, including protection from physical dangers like fire, water, burglary or dust. The standard DC-ITContainer model is equipped with EI90/F90 fire protection, whereas the GranITe-version guarantees a fire protection according to EN 1047-2 and EI 180/F180.

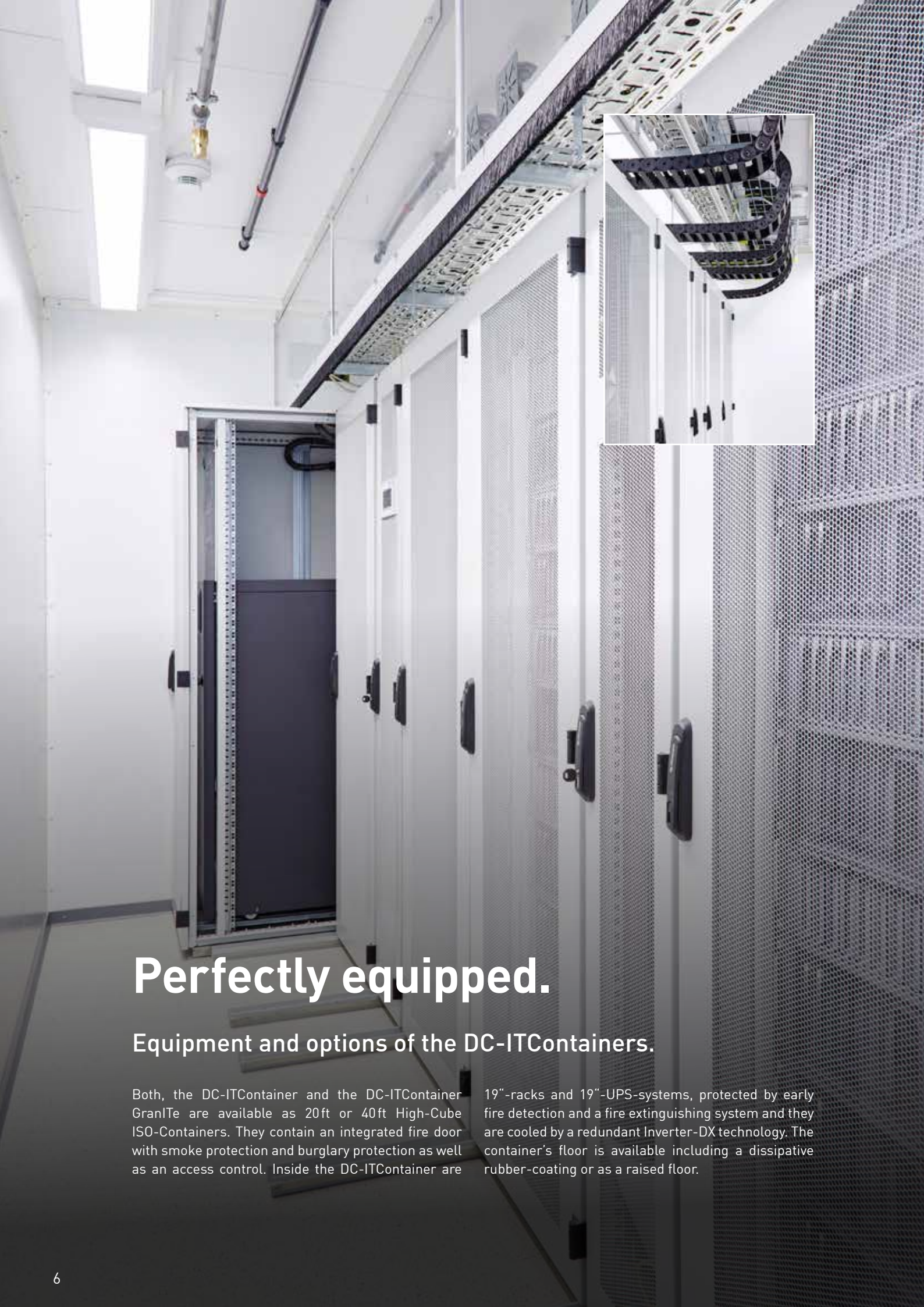# The DC-ITContainer is available in different sizes and levels of security.

TECHNICAL INFORMATION	DC-ITContainer **ITC 20*** ISO-Container 20 ft.	DC-ITContainer **ITC 40*** ISO-Container 40 ft.	DC-ITContainer **ITC GranITe*** ISO-Container 20 ft. and 40 ft. incl. IT security room
Length (external/internal)	6.058 / 5.420 mm	12.192 / 11.550 mm	6.058 / 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
Amount 482,6 mm (19˝) racks, 43 HU, 600 x 1000 mm WxD (racks for IT, technology, cooling)	max. 6	max. 16	max. 16
Cooling (100 % redundant)	2 front coolers	2-4 front coolers	2 or 2-4 front coolers
UPS	✓	✓	✓
Early Fire Detection/ Extinguishing System	✓	✓	✓
Hot Aisle Containment	✓	✓	✓
Electrical Subdistribution Unit	✓	✓	✓
Floor	Plafond floor (raised floor optional)	Plafond floor (raised floor optional)	Plafond floor (raised floor optional)
Excess Pressure Flap	✓	✓	✓

PROTECTIVE FEATURES (EXTRACT)

Fire Protection	EI90/F90	EI90/F90	R60D acc. to EN 1047-2 and EI180/F180
Burglary Protection	RC 3 (RC 4 optional)	RC 3 (RC 4 optional)	RC 3 (RC 4 optional)
Dust Protection IP 56 acc. to EN 60529	✓	✓	✓
Protection from Extinguishing Water IP 56 acc. to EN 50629	✓	✓	✓
Flue gas impermeability acc. to EN 1634-3	✓	✓	✓

FLEX-Version

* ADJUSTABLE HEIGHT, WIDTH AND DEPTH SUPPLIABLE

All DC-ITContainers are also available with adjustable heigt **(H)**, width **(W)** and depth **(D)**. Additionally, they provide the opportunity to combine several IT-containers for even more data center space.

Perfectly equipped.

Equipment and options of the DC-ITContainers.

Both, the DC-ITContainer and the DC-ITContainer GranITe are available as 20 ft or 40 ft High-Cube ISO-Containers. They contain an integrated fire door with smoke protection and burglary protection as well as an access control. Inside the DC-ITContainer are 19″-racks and 19″-UPS-systems, protected by early fire detection and a fire extinguishing system and they are cooled by a redundant Inverter-DX technology. The container's floor is available including a dissipative rubber-coating or as a raised floor.

UPS-systems

Uninterrupted power supply even in a worst case scenario.

UPS systems are used wherever you cannot afford any downtimes. In case of a blackout, the UPS solution takes over the operation in order to prevent loss of data or damage to the IT. Modern UPS-systems are equipped with a double conversion online topology that aims for an accurate voltage and frequency regulation, an absolutely uninterrupted shift between mains supply and battery supply as well as a performance factor adjustment.

- 19"-UPS to put into server racks
- Online double converter
- LCD, RS232 interface, USB port, alarm contact, emergency shutdown, 2 slots for communication cards
- Shutdown-software for all modern Windows-systems incl. server versions, Mac and Linux-systems as well as VMware und Hyper-V virtualization platforms

Alternatives:

System performance (KVA)	Back-up time (min.)
UPS 20	5
UPS 20	10
UPS 20	15
UPS 30	7
UPS 30	10
UPS 40	6

Power Distribution Unit (PDU)

More than just a name - because they have become intelligent.

Power distribution units do a lot more than "just" bringing power to the terminal device. Our intelligent and active PDU-systems have several control panels and can navigate specific outlets separately. They can also turn them all on or off at the same time, e.g. if determined conditions apply.
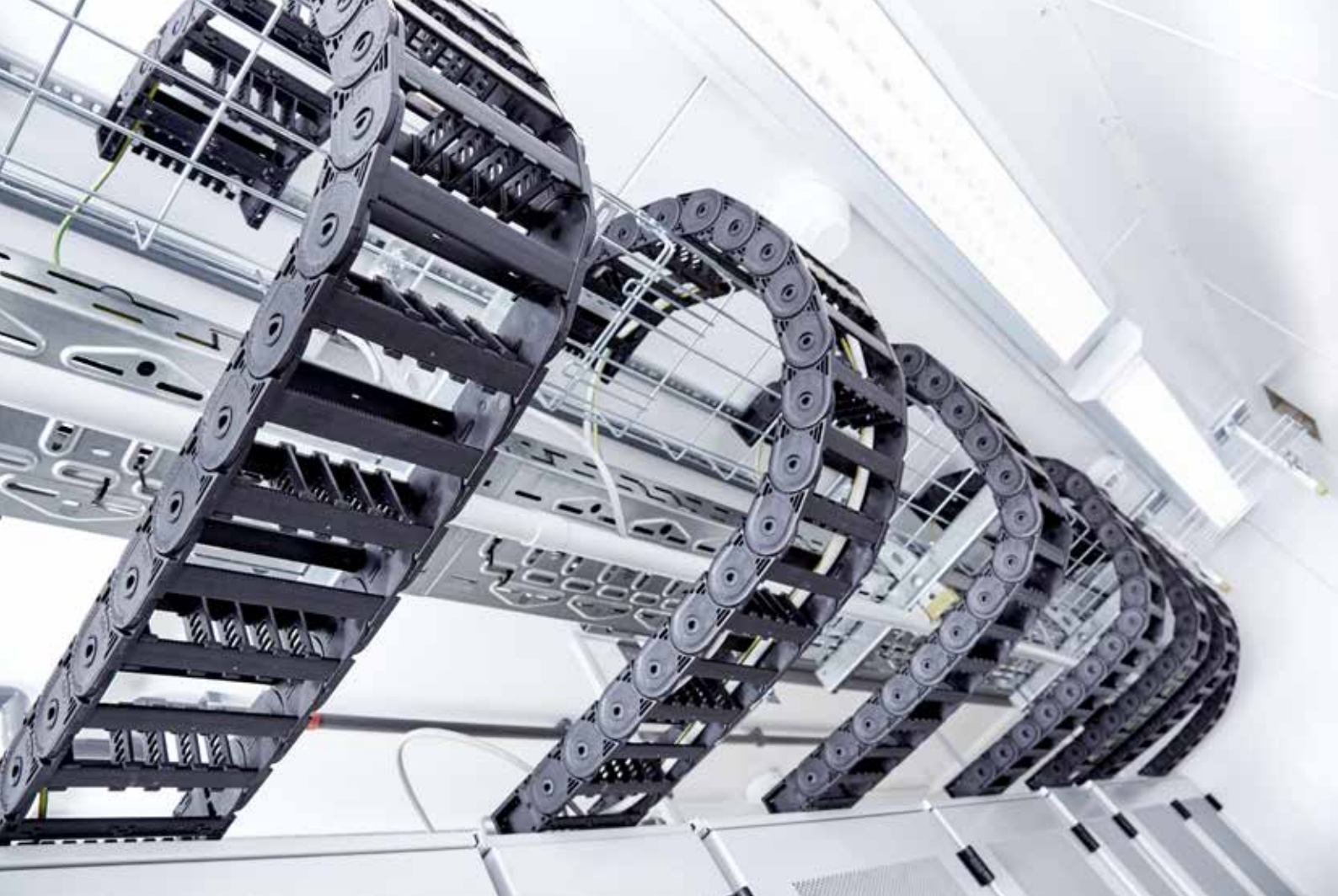
There are also a lot of safety features within the intelligent PDUs, like the integration of safety logs, which prevent unauthorized access, or alarm signals that are sent if a predefined safety limit is exceeded or undershot at a performance measurement.

482,6 mm (19") racks
IT-racks on telescopic rails provide a lot of room in the front and back

Cold and hot aisle containments
for ideal and energy-efficient airflow

Mobile Racks and intelligent Cable Routing

For better access, the racks are positioned on those premium and steady telescopic rails that can be moved. This provides enough space to easily install and maintain IT-components on both sides.

In order to guarantee optimal security and maximal availability even in an extended state, the cables are put into specific routings that move along with the telescopic rails.

Energy Efficient Cooling

Reliable temperatures are existential for a safe operation.

The temperature of your data center plays an important role in the running operation. It is good to keep the temperature at a reliably low level. But it is even better if the entire procedure is also energy-efficient. The separation of hot and cold aisles within the DC-ITContainer is just the beginning.

- Cooling through side and front coolers based on cooling agents
- Cooling agent: R410 A
- Premium class energy-efficient power-inverter-technology
- Capacities: 4, 5, 8, 10, 15, 20 or 25 kW

Side coolers between the racks guarantee an energy-efficient IT-cooling-architecture.

Fire Detection and Extinguishing System

The system detects and alarms immediately in case of a fire and fights it with NOVEC 1230 extinguishing gas.

- Early fire detection and reliable alerting
- Maximal failure safety through hardware-redundancy
- Easy and flexible linking to other crafts through flexible interfaces and standardized protocols
- Incl. battery for backup power supply

DC-MonIToring - DCM Agent

What is the basis of action? Information! Because information leads to knowledge in action.
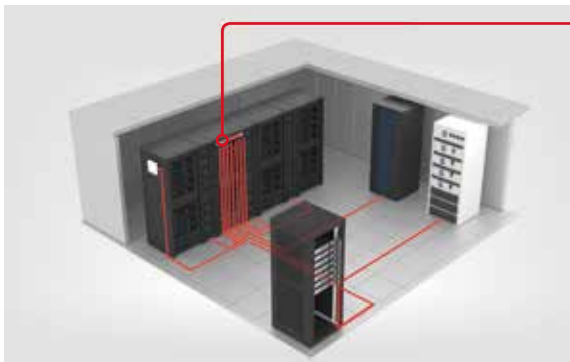
The DCM Agent is an indispensable component of the DC-ITContainer because it offers countless possibilities in the smallest space: It reads and collects the functional and operational information data of the entire IT-infrastructure installed in the data center at the respective measuring points. Using predefined properties, it then compares and evaluates the actual values with the target values. If inadmissible temperatures, excessive humidity, water ingress, fire, smoke or motion alarms as well as anomalies in access control or power monitoring occur, the DCM Agent sends flushing messages by e-mail or SMS to you or to the Network Operation Center (NOC).

Technical details:
- 16 digital inputs
- 12 power supplies (24 VDC for sensors)
- 4 analog inputs (0 to 20 mA)
- 2 digital outputs
- 1 RS485 interface for extension (DCM Extension)
- 1 RS485 interface for extension (measuring instruments)
- 2 power supply units (64 W redundant supply)
- Network connection (RJ45 10/100 Mbit/sl)
- Configuration via browser
- SNMP
- E-mail, SMS
- GPRS-modem (redundant communication)
- Dimensions: 44.45 (1U) x 482, 6 mm (19") x 300 mm (11,8")
- Operating temperature: 0 to 50 °C (non-condensing)

Additional options:
- DCM extension
- Hybrid sensor 0 to +50 °C / 0 to 100 %
- Smoke detector
- Water sensor
- Door contact switch
- Antenna extension (10 m)
- Outdoor antenna (5 m / -40 to +80 °C)

When more observation becomes added value: DC monIToring monitors the data center with all its equipment, analyzes and, above all, visualizes the data volumes and alerts the responsible employees if necessary. Because comprehensive monitoring is required in order to operate a data center efficiently and strategically, comprehensive monitoring is required.

Outdoor-Container: Backup-data center for corrugated card board specialist in Jülich

Carl Eichhorn KG relies on DC-ITContainer "Made in Germany".

Corrugated card board has become an indispensable packaging material for industry and transport. The corrugated card board company Carl Eichhorn KG with headquarters in Jülich was founded in 1855 and is now managed by the fifth generation of the family. In Jülich and at the second location in Limburg a.d. Lahn, around 250 employees are employed, who together produce around 180 m² of corrugated card board a year.

Achim Zeitz, Head of Organization and Data Processing, sees some movement in the coming years. For example, a new logistics area is to be created in Jülich. Challenges that cannot be overcome without a reliable and fail-safe IT-infrastructure – and that is why Carl Eichhorn KG turned to the DATA CENTER GROUP: "Because of the growing structures, and in order not to endanger our operations, we urgently needed a backup solution. Because if our IT fails, production downtimes can occur within 10 minutes, leading to huge losses", says Zeitz.

The solution: A container data center built 2017 in Jülich, which was built as an outdoor data center and is now located in one of the warehouses. "We have researched on the Internet who offers finished server rooms and have decided for the offer of the proRZ. The concept and the price simply convinced us."

The people at Carl Eichhorn who are in charge of the project particularly like the flexibility of the system. Basically, all you have to do is disconnect and reconnect the cables if you want to move the container. "We don't know whether we'll still need the space in the hall at some point and are happy that the data center can simply be moved outside", says Zeitz.

Carl Eichhorn KG was so satisfied with the course of the project and the performance that the next project was requested for the location in Limburg – we are looking forward to it!

Profile
- DC-ITContainer 9.0

Project size
- 20 m² area
- 3 x 19˝-Rack (each with 43 HU)

Project-specific features
- Cooling on cold base 1+1; 100 % redundant
- DC-MonIToring Type DCM Agent
- Early fire detection/extinguishing system
- Emergency generating set

"The latest generation of the DC-ITContainer guarantees more mobility, security and flexibility. This way, you can bring your new data center into service immediately."

Martin Hüsch | Product Manager

Arrange a consulting appointment about the DC-ITContainers now.
Visit our website and learn more about our services. If there are any questions don´t hesitate to call us.

More information by telephone: +49 2741 9321-0

www.rz-products.com

Intelligent solutions
For highly efficient data centers

DC-**IT**Room

The room solutions GranITe and QuartzITe offer the best possible security for your IT-infrastructures. They are modular, scalable and offer inspected/examined or rather certified protection against physical dangers like fire, explosion, water, unauthorized access, etc. The DC-ITRoom products guarantee an IT functional reliability.

DC-**IT**Safe

Our DC-ITSafe is available in different versions adapted to your requirements – starting with 21 HU for the DC-ITSafe Office Edition going up to 56 or even 62 HU. Customized and individual requirements are realized by variable recesses for important and required connections. Cable ducts can be arranged flexibly. Any number of Mini-Data-Centers can be interlinked. The DC-ITSafe grows with increasing requirements, thus ensuring the highest possible flexibility.

DATA CENTER
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proRZ   RZingcon   SECUrisk   RZservices   RZproducts