

# EdgeDC

**Fast to Get.**

**Easy to Deploy.**

**TCO-driven Product.**



ACCELERATING DATA CENTERS' RETURNS SINCE 1991

**ALTRON**  
MODULAR

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# EdgeDC

All the features of a brick-and-mortar data center  
– in a mobile, scalable, and energy-saving environment.

**Ready to operate in 6 – 12 weeks.**

Edge data center undergo thorough IST – integrated system testing before delivery to the site.

- Modules 20'–45' ft
- 4 – 15 ICT racks 42U
- Tier IV – II resilience
- 3m wide for operators' comfort
- 17 ready-made configurations
- Online configuration tool
- Customization
- Special Military Specs



# 20 years History of building DCs



2001  
Gen 1



2019  
Gen 2



2023  
Gen 3



# 30 years of Innovation

For 30 years, Altron has been researching, developing and implementing cutting-edge technologies for data centres – several of them being unique to Altron products.

- **Patented:** containerised data centre patent holder for the only ALL-IN-ONE module with no external parts
- **Design:** entrance space, hot/cold aisle LED monitoring
- **Security:** EMC protection, state-of-the art entrance (vein pattern readers), laser protected entrance
- **Cooling:** Free-cooling technology
- **Power:** LiFePo4 Battery



# Why EdgeDC?

Support immediate need for ICT capacity



11 months



3 months

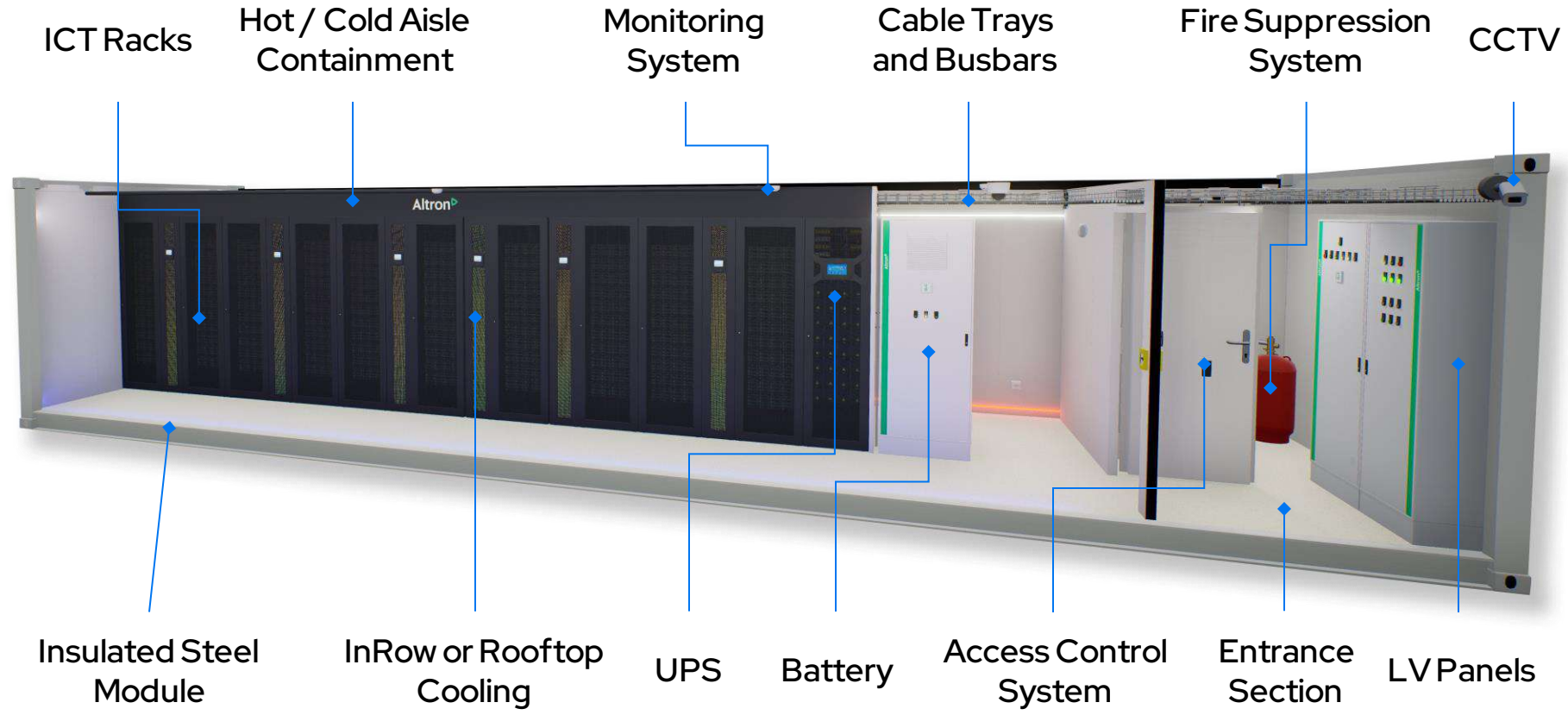
# Product Lines



	EdgeDC Series N	EdgeDC Series R
<b>Cooling Units location</b>	In-Row	Rooftop
<b>Racks</b>	3.5 – 14	8 – 15
<b>Dimensions</b>	20ft, 30ft, 40ft & 45ft	30ft, 40ft & 45ft
<b>ICT power range</b>	40 kW – 100 kW	55 kW – 110 kW
<b>Max ICT power per rack</b>	10 kW	10 kW
<b>PUE</b>	1.4	1.25
<b>TIER Classification Standards</b>	TIER I / III	TIER II – IV
<b>Redundancy (power/cooling)</b>	2N / N + 1	2N / N+1
<b>UPS Battery Runtime</b>	7 minutes	5–9 minutes



# EdgeDC



SMART

# Smart Services

One of the ways to **decrease operating costs and increase efficiency is through converged operations**. The principle of convergence is the transition from the management of individual systems and subsystems to the management of one integrated unit, which allows for assisted and/or autonomous operation.

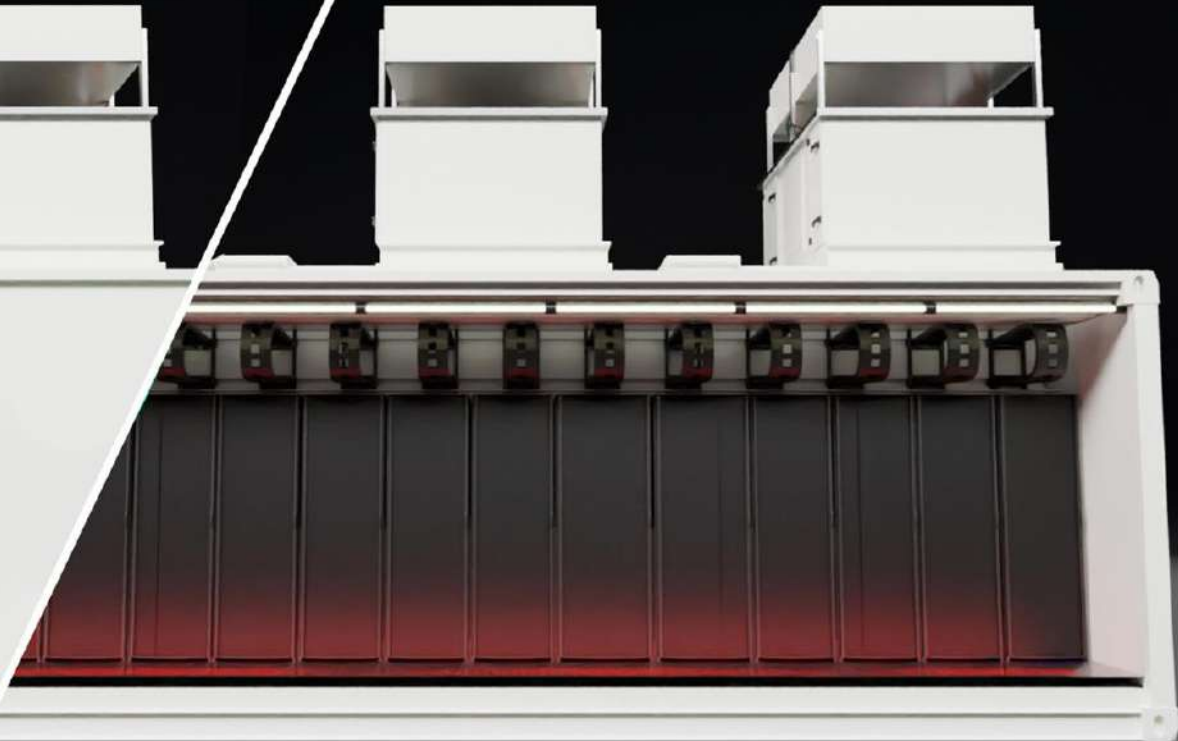
Stemming from our 30-year industry experience we have Altrix monitoring and management system with following modules:

- Real-time monitoring
- Control & automation
- Analytic services: predictive maintenance
- Operations optimization





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# EdgeDC

Standard scope of the module / Technology Expertise

Electrical System	Mechanical System	Civil Works	Security & ELW System	Fire Detection & Suppression System	Passive Network Cabling	Monitoring & DOM
Generator Sets	Computer Room Air Conditioners	Construction Elements	Electronic Security Systems	Electronic Fire Alarm	Metallic Cables	Environment Monitoring
Fuel Systems	Chiller Plants	Raised Floors	Access Control Systems	Air Sampling Smoke Detectors	Optical Fibres	Communication Paths, Data Acquisition
UPS	Air Handling Units w. Heat Recovery	Suspended Ceilings	Camera Units, CCTV	Fixed Fire Extinguishing Systems	Patch Panels	Monitoring Servers
DC Systems & Batteries	Humidifiers	IT & non-IT Racks	Security Doors	Fire Resistant Sealing	KMV Switches	Software
Control System	Circulation Pumps	EMC Protection		Fire Resistant Flap Valves and Claps	Measurement Instruments for IT Networks	Remote Monitoring
HV Switchboards	Thermal Storage Systems	Other Site Preparation				Local Surveillance Centre
Transformers	Piping Systems					DCIM
LW Switchboards						
Wiring and Electrical Cabling						



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# Multiple cooling options

- inRow
- Rooftop
- Direct and indirect free cooling units

## Situation

- Cooling = the most important factor in efficiency = PUE factor
- Member of ASHRAE, continuously improving the expertise in cooling
- Locally tested in extra high temperatures (with high humidity and sand particles presence) and extra low temperatures

## Solution

- **Free cooling:** high efficiency, low operating costs

## Why EdgeDC

- Offers 2 main choices of cooling unit placement + free cooling option



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# Customisable from standard to premium specs

Special requirements of the clients  
x design, consultation by us

## Use case: Military

Premium options:

- Extra thick metal case
- Special color to prevent interception of the data
- Extra secure entrance + perimeter security

## Use case: ISP

Premium options:

- Locally tested (humidity, temperature, sand) x Russia (cold)



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# Integrated, scalable, flexible, on-demand

**Integrated**

All in one module, delivered anywhere

**Scalable**

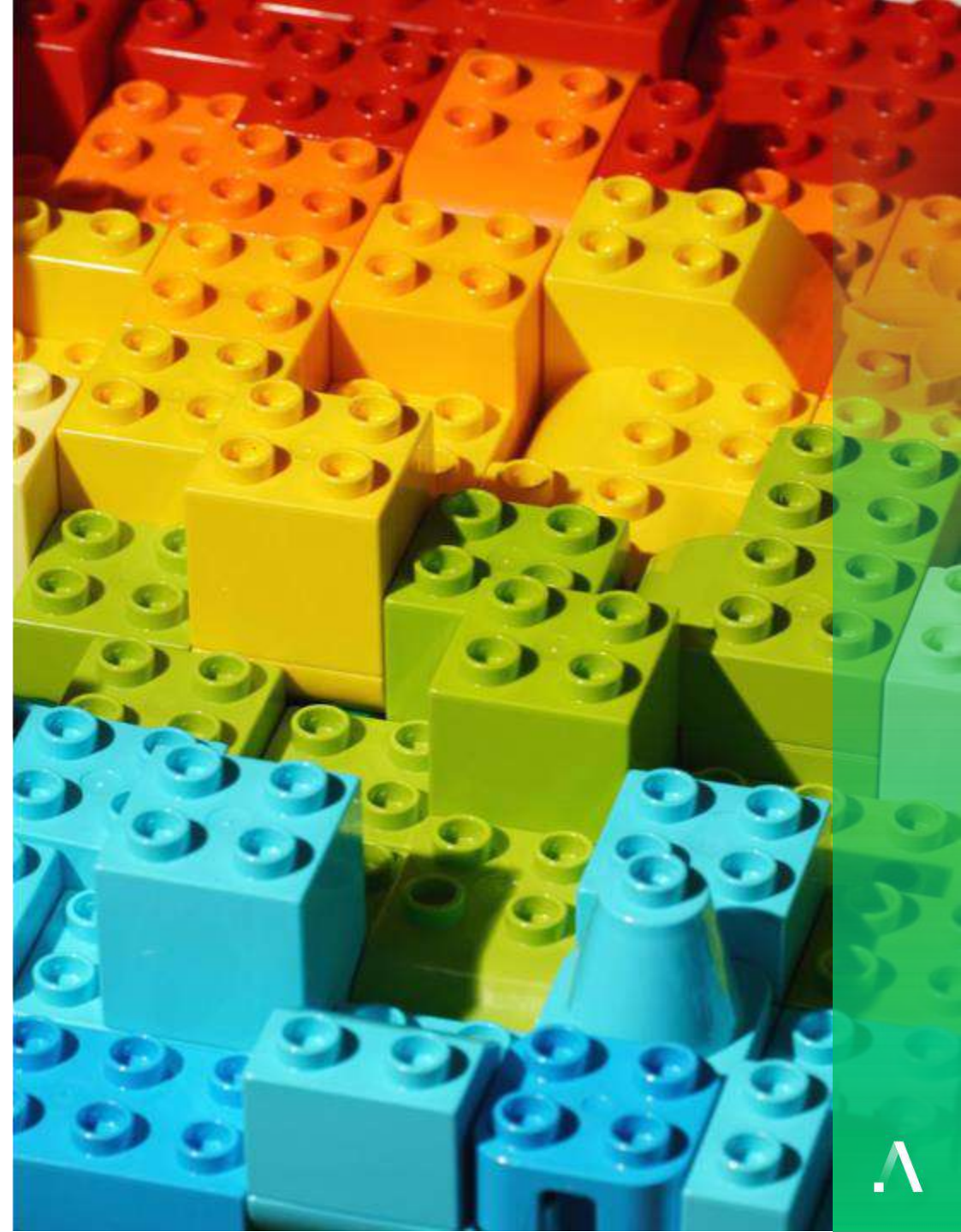
Just add more racks

**Flexible**

Easily transportable,

**On demand**

Configure your EdgeDC in configurator



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# Ruggedized and factory tested

## Challenge

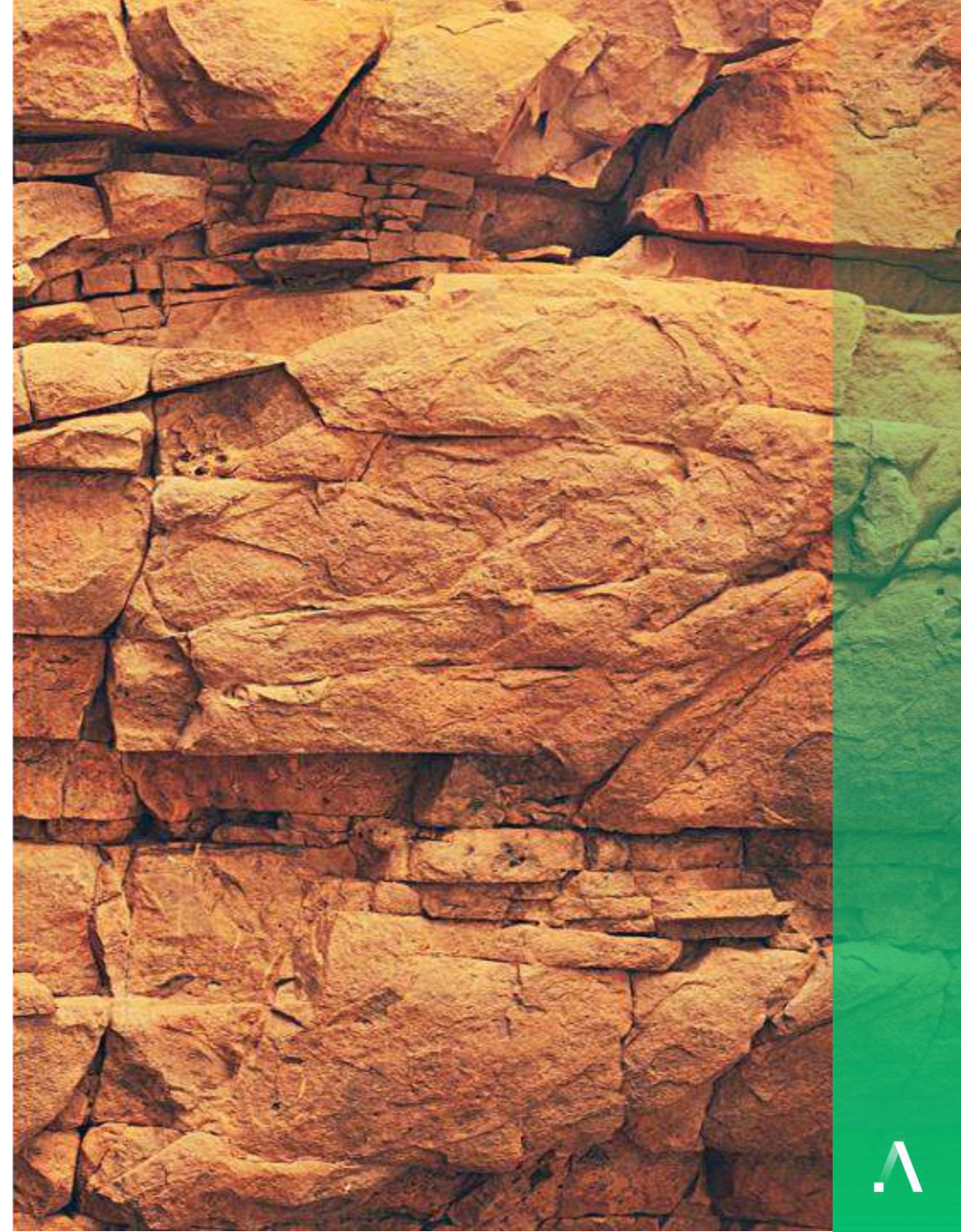
- Military & civil defense
- Climate – extra hot, extra cold
- Oil, gas, and mining industries
- Marine environment and offshore platforms

## Solution

- Hard steel construction can be additionally equipped with EMC shielding, high-end access control systems, CCTVs, and intruder detection systems, to accomplish the highest physical and cyber security.

## Why EdgeDC

- Security by design, highly mobile capacity



# Benefits

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## Fast

Accelerated returns through prefabrication.



## Ease of mind

Standardized product delivering instant IT capacities.



## Value for money

Complex integration activities completed at factory level.

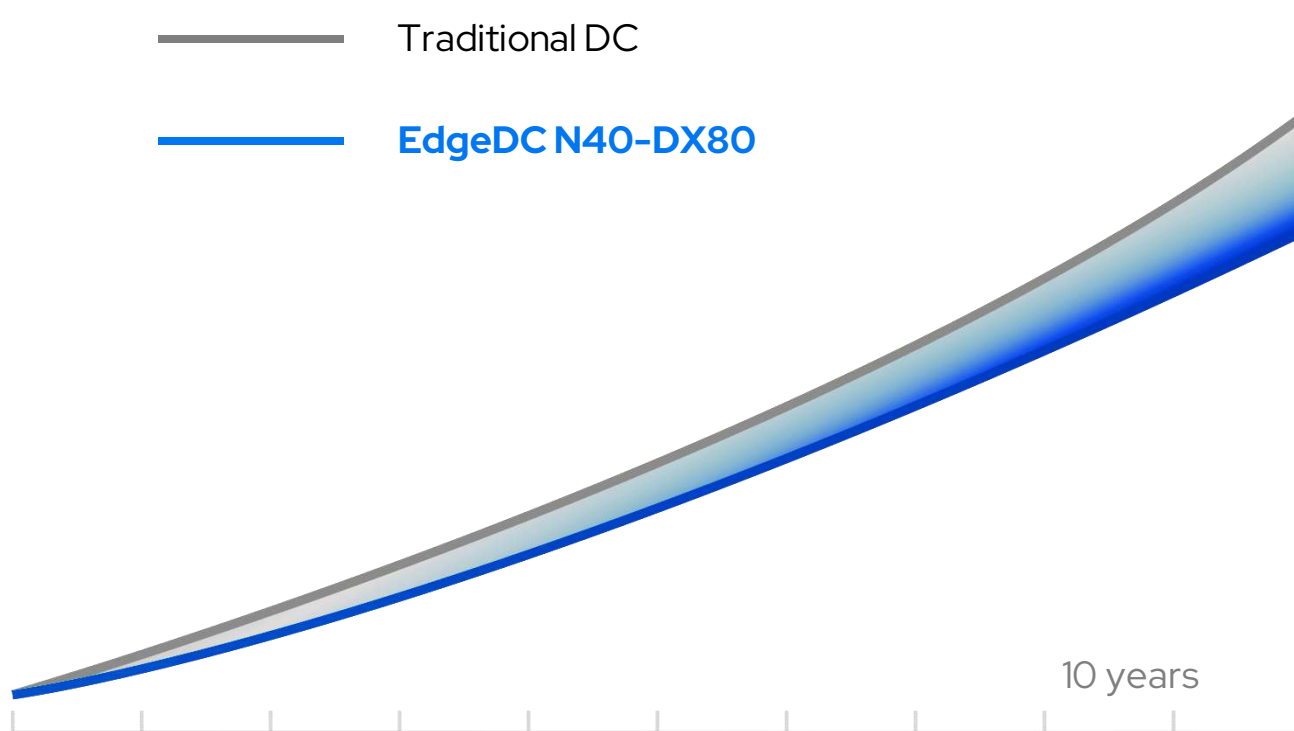


## Global product, localized

Physical and logical separation increase investment protection



# Total Cost of Ownership



## Up to 19.5% lower TCO

We have calculated Total Cost of Ownership (TCO) for the 10-rack data centre EdgeND40-DX80 and traditional DC built as a server room.

## Up to 22.2% lower OPEX

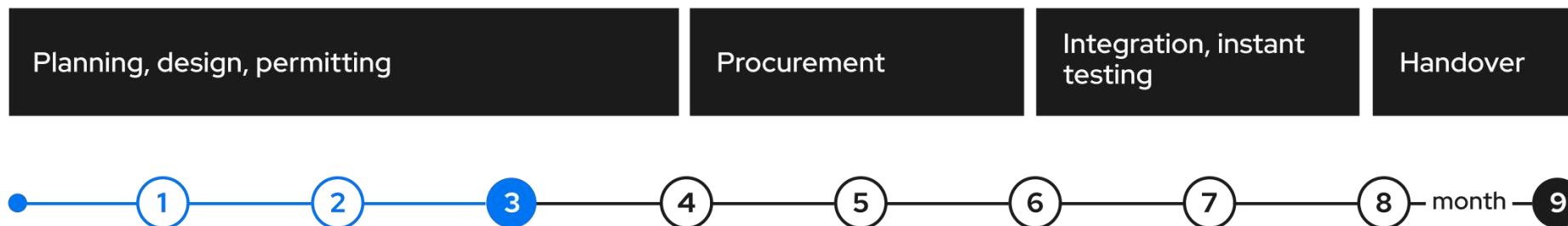
- high energy efficiency (low PUE)
- low maintenance costs



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# Fast to deploy

### Standard Server Room



### EdgeDC project



**3 months from enquiry  
to new capacity**



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# Global product, localized

Thanks to our certified partner network.

▶ **CETIN**  
ČLEN SKUPINY PPF

O<sub>2</sub>

4G

DIGITAL  
TECHNOLOGIES  
SERVICES &  
MANAGEMENT



Tahaluf

SAFE CITY  
GROUP

GreenLine  
Technologies



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# Trusted by



Ministry of Defence  
of the Czech Republic



وزارة الداخلية  
Ministry of Interior



الوزارة العامة للشرطة  
Ministry of Interior



MINISTRY  
OF DEFENCE  
OF THE SLOVAK REPUBLIC



Sultanate of Oman  
Ministry of Defense



MINISTRY OF THE INTERIOR  
OF THE CZECH REPUBLIC

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# Accolades

ISO  
14001:2018

ISO  
9001:2018

ISO  
20000-1:2018

ISO  
18001:2008

ISO  
27001:2018

National Security Authority of the Czech Republic  
**Certificate classification level: Secret**

Armed Forces of the Czech Republic  
**Certificate of compliance with AQAP 2110**

National Civil Aviation Authority of the Czech Republic  
**Approval Certificate for Contractor**

Uptime  
Institute®



# Thank you!

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