

30 YEARS ON DATA CENTER MARKET DESIGN BUILD MAINTENANCE **Techko®** – Since the beginning of our operations over thirty years ago, we have been engaged in designing, building, and maintenance of the technical infrastructure of data center facilities.

The solutions crafted by our designers meet the technical, functional, formal-legal requirements, technical standards (TIA-942, EN50600, Uptime Institute recommendations), and investors' expectations typical for such facilities. Our major milestones in this area include: designing and implementing the first data center facility in 1994, the first data center with ICT power supply capacity exceeding 3 MW in 2003, and in 2015, the first data center campus with power supply exceeding 20 MW. Our most recent project in this field was the Warsaw Data Hub for Orange S.A. in Łazy near Warsaw.

In our projects, we take into account environmental protection needs, sustainable development, and IT ecosystems. We employ technical and functional solutions that assist investors in meeting current formal-legal requirements stipulated in ESG reporting outlined in the CSRD Directive of the European Parliament and Council (EU) 2022/2464 of December 14, 2022 (reporting concerns the organization's impact in four key areas: environment, society, human rights, and corporate governance) or the EED Directive of the European Parliament and Council (EU) 2023/1791 of September 13, 2023, concerning the energy efficiency of designed and operated data center facilities.

Addressing the current technical challenges posed by new information technologies (including artificial intelligence, machine learning, edge data processing), we employ, in the scope of ICT power supply and cooling, not only proven solutions but also innovative technological and construction solutions. This, in turn, supports the goals of sustainable development and effective mitigation of negative environmental impact.

In the realm of technical infrastructure, we have begun implementing liquid cooling systems for ICT devices in both versions: direct processor cooling (DLC) and immersion cooling, in lithium-ion battery and hydrogen cell power supply systems, as well as in systems using low-pressure water mist for fire suppression.

It is worth emphasizing that the use of liquid cooling enhances the energy efficiency of data processing centers. By employing these solutions, we are able to design the technical infrastructure of data processing centers in such a way that during operation, an overall PUE index lower than 1.2 can be achieved.





TECHKO®

TECHKO® ModularDC is our new product, which is a comprehensive solution related to the design and construction of data center facilities, utilizing modular building technology (prefabricated steel modules up to 110m2 in size). The solution is an innovation in the Polish market, combining high quality and durability of traditional construction with the speed of implementation and mobility of container systems.

TECHKO® ModularDC complements our offer in the data center segment. Such facilities are mainly constructed in the Polish market using traditional building technology or, less frequently, container-based technology (often mistakenly referred to in the media as modular).

TECHKO® ModularDC is a proposition for companies that want to build a new data center facility to meet their IT needs in this area or want to provide commercial services related to system colocation, data storage, SaaS, PaaS, IaaS services etc., provided in the so-called "cloud", edge data processing, and need a facility built in a short time, within a reasonable budget, and "close" to the customer.

TECHKO® ModularDC is characterized by the following features:

- Up to 50% shorter investment time compared to traditional technology,
- Up to 90% of the scope of work performed in the production facility,
- Mobility and scalability of the solution,
- Completeness and optimization of work conducted (scope, time, quality),
- Price guarantee, no additional costs related to additional work and design errors,

• Guaranteed product quality achieved in controlled conditions of the production facility,

• Minimal impact of investment realization on its immediate surroundings (particularly important in heavily urbanized locations).

TECHKO® ModularDC aligns with the objectives of the European Green Deal by:

- Reducing carbon footprint,
- Limiting emissions of dust and water consumption,
- Closed–loop material economy,
- High energy and process efficiency.

For more information about our products and current offers, please visit our website www.techko.eu, and our profiles on LinkedIn and Facebook. We also invite you to contact us directly by phone at +48 22 868 17 35





TECHKO

Techko®'s offering for data center facilities includes:

Design – We provide comprehensive multi-disciplinary design services, starting from defining technical and functional parameters in collaboration with the investor, through developing architectural-technical concepts and creating multi-disciplinary construction designs, to producing detailed execution projects, verifying completed works, and preparing post-execution documentation.

Our in-house multi-disciplinary team of designers utilizes Building Information Modeling (BIM) technology for designing, facilitating efficient interdisciplinary coordination during the design phase, which ensures smooth construction execution in the future.

In addition to preparing complete design documentation, we also handle administrative procedures related to obtaining necessary permits and approvals.

Build – We carry out installation and commissioning works for all systems and installations comprising the technical infrastructure of the data center. We have our own experienced team of installers who conduct their work according to technical knowledge principles and engineering standards.

Maintenance – We assist the investor in establishing professional maintenance principles for the data center's technical infrastructure (SLA services), perform warranty and post-warranty services, and offer ongoing service support. Drawing on our extensive experience in this field, our service maintenance ensures the safe operation and development of existing technical infrastructure installations in data centers. We also provide audit services for these installations.



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