

# DATA CENTER SOLUTIONS FOR THE WHITE SPACE



RELIABLE, EFFICIENT AND SCALABLE  
DATA CENTER INFRASTRUCTURES IS  
WHAT WE CREATE

# Legrand Data Center Solutions

The role of data centers is rapidly changing, in part driven by the cloud, data growth and IT cost reduction. Significantly more dynamic activities are taking place in the data center environment. This presents new challenges when it comes to designing and future-proofing data center infrastructure.

Building a data center demands a high degree of flexibility and a modular approach in order to be able to adapt to the ever-changing needs of the market. Projects are also becoming more and more complex due to increasing globalisation. Support and assistance from a well-informed, trustworthy partner is essential.

## RELIABLE, EFFICIENT AND SCALABLE DATA CENTER INFRASTRUCTURES IS WHAT WE CREATE

With award-winning solutions from Legrand, Minkels and Raritan you benefit from optimal uptime of mission-critical operations. Our team of local specialists design and build innovative solutions including enclosures, cooling, power, structured cabling and access management to meet your unique requirements. Relied upon by thousands of organisations for over 30 years, Legrand Data Center Solutions is your global partner to count on. For more information visit:

[datacenter.legrand.com](http://datacenter.legrand.com)

## YOUR BENEFITS

- Increase your ability to scale according to your business requirements
- Get the maximum from your existing & future IT equipments
- Adapted to all data center use
- Enhance your data center reliability

## POWERED BY SPECIALISTS

### legrand®

Legrand cabling systems for the white space currently provide high-quality connectivity to more than 200 million devices. The Legrand Group is a world leader in communication networks for data transmission. Its investment in the development and design of structured cabling systems and solutions has enabled it to expand its offer and achieve the highest level of performance.

### MINKELS

Minkels is a knowledge-driven producer and worldwide supplier of high quality solutions for data center infrastructure. Minkels' products stand out for their innovativeness and flexibility. Customers can always be assured of getting the very latest data center technology, modular solutions that respond to evolving, customer-specific business requirements.

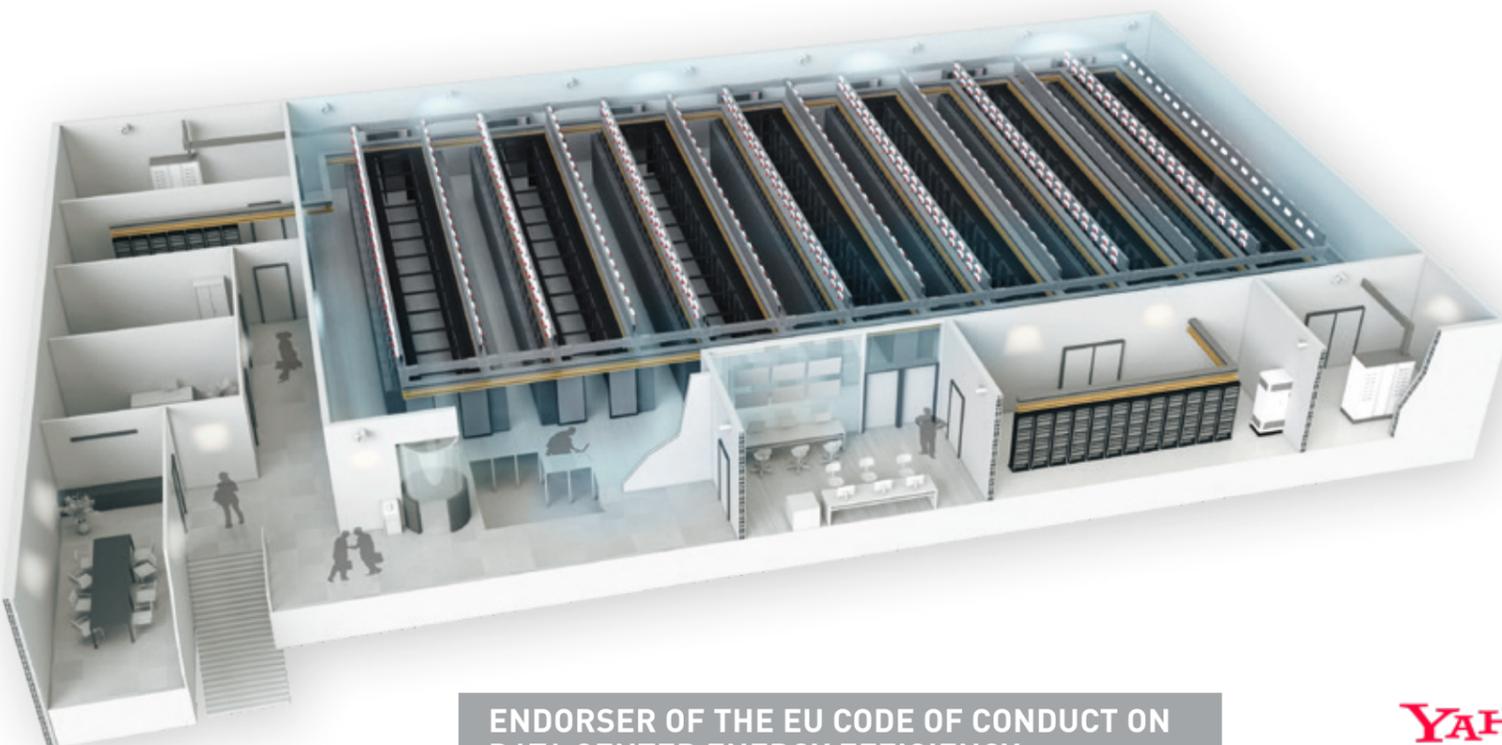
### Raritan

Raritan offers data center power management solutions that include intelligent PDUs, transfer switches, environmental rack controllers and sensors as well as serial console servers and KVM-over-IP switches. In over 76 countries and 60,000 locations worldwide, Raritan's award-winning hardware solutions increase energy efficiency, improve reliability, and raise productivity.

## OUR REFERENCES

Our customers talk about which data center challenges they are facing such as, IT cost reduction or future-proofing their IT investments. The cases show how they have been handling these challenges with Legrand Data Center Solutions. You can read the stories on our websites:

[www.minkels.com/cases](http://www.minkels.com/cases) • [www.raritan.com/eu](http://www.raritan.com/eu)



## ENDORSER OF THE EU CODE OF CONDUCT ON DATA CENTER ENERGY EFFICIENCY

Formulated by the EU's Joint Research Center, the Code is a measured response to the energy challenges the EU faces. It's aim is to encourage companies with data centers to reduce energy consumption while ensuring business objectives continue to be met.

As an endorser, we have pledged to implement the Code's ethos through devising products and services that help organizations to bring their data centers into line with its best practice recommendations.

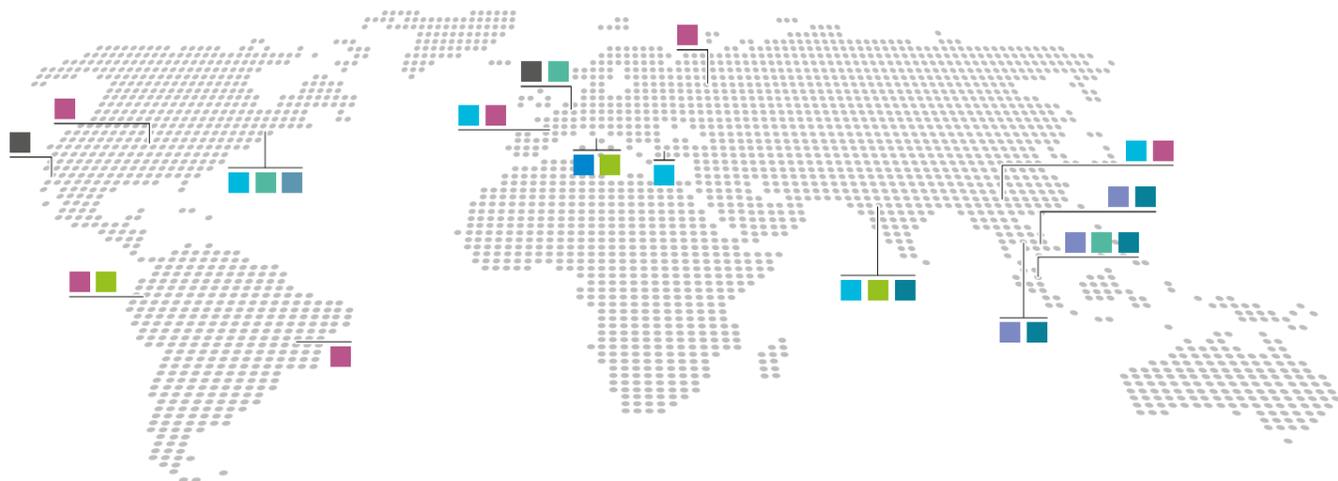


# Legrand: Local presence, worldwide support

Within a context of increasing globalization, in which projects are more and more complex, the support of a knowledgeable, reliable partner is essential: it is the real key to success!

Choosing Legrand Data Center Solutions gives you the assurance of global expertise thanks to:

- A global network of specialist partners.
- Innovative applications and a comprehensive range of products enabling you to build solutions and configure systems which incorporate the latest technological advances.
- Specialized teams will help you set up your project, from its design through to final implementation.
- With the modular and integrated products available from Legrand Data Center Solutions, you are assured of future-proofing your data center investments. Only then can the right level of performance be offered, **powered by specialists!**



# Thought leadership

The current data center market is getting more and more mature with a strong focus on availability, efficiency and cost control. Legrand's approach is to fully understand its client's requirements and business drivers. It will constructively challenge and align it. In-depth market and product knowledge as well as a strong link with standard committees and the consultant world further helps to get the best results for our client's data centers.

Our specialists of Legrand, Minkels and Raritan have published a number of white papers which can be used as a guide to create future-proof and energy-efficient data centers. Next to this other tools like specification documents, configurators, training and knowledge sharing sessions are provided at your request. As can be expected, all knowledge is perfectly translated into the design of our data center portfolio seamlessly.

## AN ACTIVE INTERNATIONAL PRESENCE

ESTABLISHED IN OVER 90 COUNTRIES  
SALES IN CLOSE TO 180 COUNTRIES  
4.9% OF TURNOVER INVESTED TO RESEARCH & DEVELOPMENT



## WHITE PAPERS

Our experts have published a number of white papers which can be used as a guide to creating a future-proof and energy-efficient data center.

### Minkels' white papers for, among others:

- Micro data centers
- Airflow management
- Fire suppression
- Aisle containment

Find more white papers on the website: [www.minkels.com/whitepaper](http://www.minkels.com/whitepaper)



### Examples of Legrand's white papers:

- Understanding the new perf category for balanced twistedpair cables
- Fiber considerations when migrating to 40 100-Gigabit Ethernet
- Fiber Optic system - transmission speed from 40 Gbps to 100 Gbps
- LCS3 Evolution of standard 11801 ed 3 2018



### Examples of Raritan's white papers:

- The New Digital Outpost: Why We Must Rethink Remote Infrastructure
- Data Centers of the Future: A Shifting Landscape from the Core to the Edge
- Data Center Physical Realities in a Software-Defined And Virtualized World
- Deploying High Power to IT Equipment Racks

Find more white papers on the website: [www.raritan.com/resources/white-papers](http://www.raritan.com/resources/white-papers)

## CORPORATE SOCIAL RESPONSIBILITY

The Legrand Group strives to operate in an ethical, innovative, customer-oriented and sustainable manner in its day-to-day activities. Thus, Legrand attaches great importance to Corporate Social Responsibility (CSR).



### OUR TEN PRIORITY OBJECTIVES:

1. Provide sustainable solutions
2. Play a driving role in the electrical sector
3. Act ethically
4. Ensure responsible purchasing
5. Enable access to electricity for all
6. Respect human rights
7. Guarantee health and safety at work
8. Develop skills and promote diversity
9. Reduce the Group's environmental footprint
10. Innovate for a more circular economy

**RELIABLE, EFFICIENT AND SCALABLE DATA CENTER INFRASTRUCTURES IS WHAT WE CREATE**

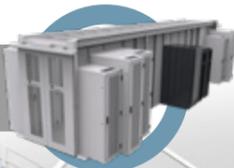
Legrand Data Center Solutions offers sustainable data center solutions. The key concepts of modularity, flexibility and energy-efficiency have been implemented throughout the extensive product portfolio. This ensures that customers always benefit from the latest data center technologies: modular solutions that are fully adapted to the individual and ever-changing needs of the data center infrastructure.

**AISLE CONTAINMENT**

The Minkels Next Generation aisle containment solution is rack supported and efficiently separates hot and cold airflows in data centers. The Minkels Free Standing offers 'pay-as-you-grow' capabilities with infrastructure fitted for phased rack population. The Free Standing aisle efficiently separates hot and cold airflows, so now investments in racks can be spread over time.



**AISLE CONTAINMENT**



**SERVER RACKS**

Minkels has an extensive portfolio of racks for your data center. The Minkels racks are perfectly suited for the installation of (blade) servers, switches, patch panels, routers and storage equipment. Modularity and flexibility are always central concepts in our design process.

**SERVER RACKS**



**ACTIVE COOLING**

Minkels offers a complete portfolio of active cooling solutions. The portfolio includes active cooling equipment based on H2O (water) and DX (refrigerant). These products are typically placed as frames between the 19-inch racks, this is referred to as "row based cooling". Row based cooling has taken off immensely in server rooms and data centers and will continue to grow in the near future.

**ACTIVE COOLING**



**LCS3 CONNECTIVITY RACK**

The Legrand open racks provide greater flexibility and optimum efficiency in any data center. The fixed racks provide an economical mounting platform for switches and servers while the adjustable rack allows all 4 mounting rails to be adjusted even after the rack has been fastened to the floor. Front and rear waterfalls allow for equipment patching and server patching.

**LCS3 OPEN RACKS**



**INTELLIGENT PDUS**

Raritan's award-winning PDUs that, other than reliable power supply, are a launch pad for real-time remote power monitoring, environmental sensors, and data center infrastructure management. The PX series offers hundreds of models with options including outlet switching, individual outlet metering, high power, and 400V three-phase power distribution.

**INTELLIGENT PDUS**



**LCS3 STRUCTURED CABLING SYSTEMS**



**KVM-OVER-IP**



**KVM DRAWERS**



**SERIAL CONSOLES**



**CENTRALIZED SERVER ACCESS & CONTROL**



**ENVIRONMENTAL SENSORS**



**RACK TRANSFER SWITCHES**

**LCS3 STRUCTURED CABLING SYSTEMS**

Legrand provides high-quality connectivity to more than 200 million devices. Its investment in the development and design of structured cabling systems and solutions has enabled Legrand to expand its range of products. Legrand has moved from standard to premium copper and fibre global solutions for structured cabling – both in data centers and LAN.

**KVM-OVER-IP**

Raritan's enterprise-class KVM-over-IP switches provide multiple users with remote BIOS-level access and control of multiple servers to maximize uptime and improved productivity.

**KVM DRAWERS**

Connect to your existing analog or digital KVM switches and get video, keyboard and touchpad functionality from a single workstation to manage one or multiple racks of servers.

**SERIAL CONSOLES**

Raritan's next generation serial console servers / terminal servers providing serial-over-IP access and control of serial devices — anytime, anywhere. Enjoy unrivaled control over servers, networking devices, security appliances, rack PDUs, virtual hosts, and wireless / telecom equipment.

**CENTRALIZED SERVER ACCESS & CONTROL**

Access and control entire IT infrastructure(s) from a single system, featuring BIOS-level, out-of-band KVM and serial access to a wide variety of computer and serial devices.

**ENVIRONMENTAL SENSORS**

Raritan's plug-and-play sensors for monitoring and alerting of heat, humidity, airflow, air pressure, water/leaks, contact closures, motion around a cabinet, and vibration. Allows to monitor real-time environment data and report trends over time.

**RACK TRANSFER SWITCHES**

Intelligent hybrid transfer switches prevents downtime with single power supply devices. It is the first in the world to offer both electromechanical relays and SCRs to overcome the limitations of a traditional ATS.

# More information?

More information about Legrand and its specialist brands can be found in several brochures which can be downloaded from the websites.



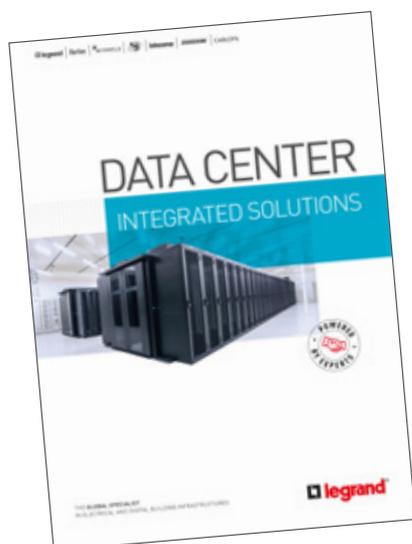
[WWW.LEGRAND.COM](http://WWW.LEGRAND.COM)



[WWW.MINKELS.COM](http://WWW.MINKELS.COM)



[WWW.RARITAN.COM](http://WWW.RARITAN.COM)



Please see our comprehensive data center brochure for the complete data center portfolio:

[DATACENTER.LEGRAND.COM](http://DATACENTER.LEGRAND.COM)