

# DATA CENTRES

EXPERTLY DESIGNED FOR  
EXCEPTIONAL PERFORMANCE



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## Next-Generation Solutions for Data Centres

Data centres, service providers and hosting facilities face one challenge in common – the technology needed to keep information flowing is ever changing.

As data centres grow in size, complexity, volume and depth of information stored and dispatched, you need to consider the crucial roles cabling infrastructure and network management play in addressing change. These roles can vary from traditional needs like reliability, flexibility, growth and security, to new challenges like power reduction, space maximisation, and cooling. These tests apply equally to large and small enterprises that today compete head-on in a 24/7, internet-based global economy.

With a century of experience and a global presence, Nexans possesses the quality engineering, technical expertise and service reputation to address these evolving trends. Through its LANmark and LANsense brands, a full line of cables, connectors, panels, intelligent management hardware and software, and related accessories for next-generation data centres are expertly designed for exceptional performance.



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MICHAEL VAN BOHEEMEN,  
Sales Manager The Netherlands



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HARRY FORBES,  
Chief Technology Officer



"Nexans' extensive range of products and accessories are ideally suited to data centres of all sizes because of the scalable, cost-effective flexibility designed into each."

MARIANNE SERVEZ,  
Marketing Manager



"Nexans LANmark copper and fibre cabling minimise data centre disruptions, reduce recurring costs and ensure greater operational continuity for better business vitality."

DIDIER WILLEMS,  
Project Design &  
Support Manager

## Physical Infrastructure Solutions – Connect to tomorrow's world with LANmark

### » Can your copper and fibre infrastructure support continuous system upgrades for years to come?

Nexans LANmark solutions for copper offer cost-effective, bandwidth-rich cabling supporting 40 Gigabits per second (Gbps) and beyond. LANmark optical fibre (OF) solutions are designed with high fibre count, modularity, long-distance reach, and optimal performance reliability to fully support evolving 10G blade server virtualisation.

### » Is your infrastructure optimally designed to perform in reduced space and higher density?

Nexans LANmark-OF solutions provide the industry's highest density patching systems, specifically aimed at maximising multiple SAN/NAS fabric switches in confined spaces. LANmark copper patch panels have options that can increase patching frame density by 50%.

### » Will your fibre uplink infrastructure support future migration to 40G and 100G speeds?

Nexans LANmark-OF systems include Multi-fibre Push On (MPO) connectorised parallel optics providing a clear migration path to these higher speeds.

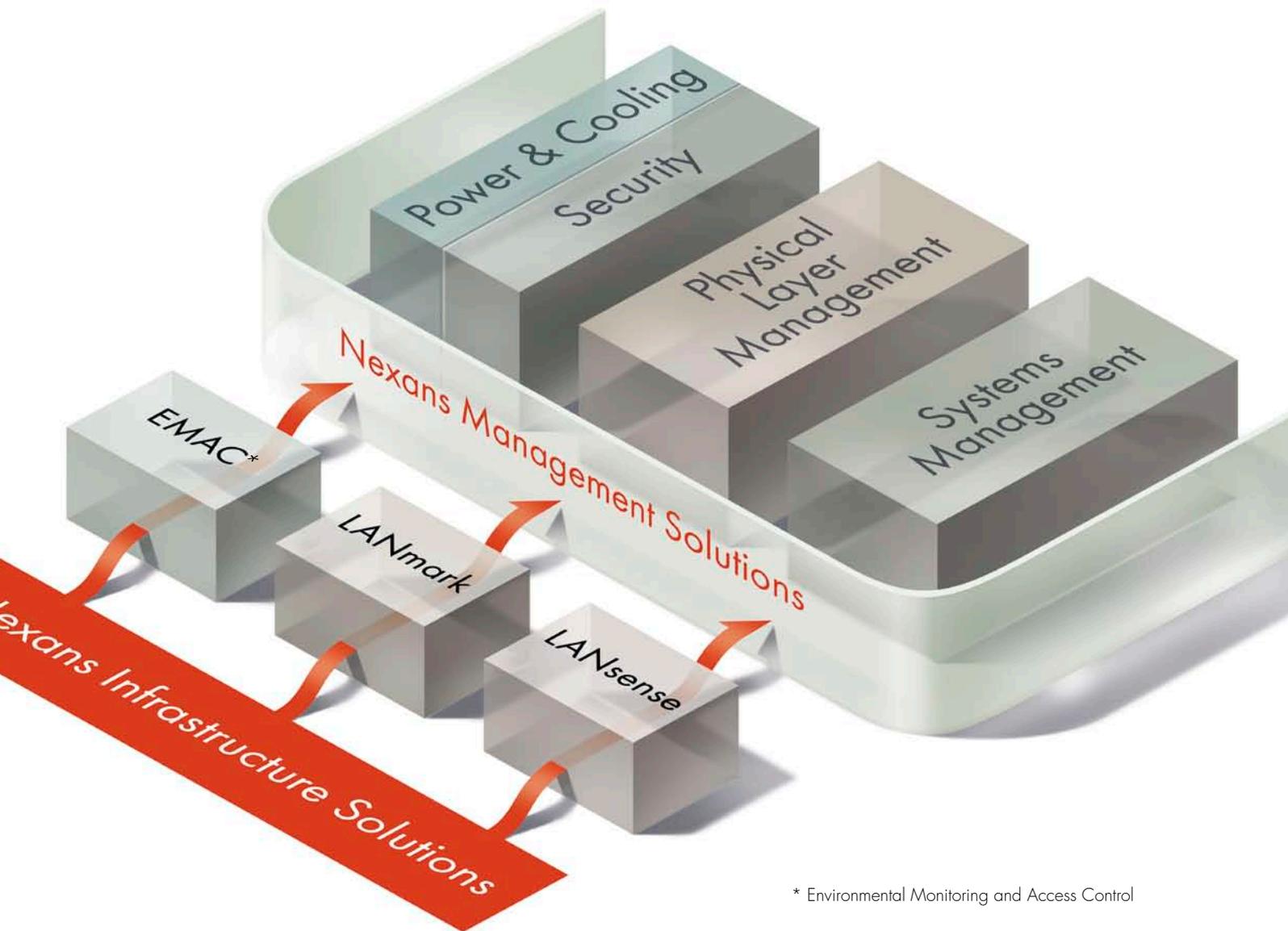
## Integrated Monitoring and Control Solutions – Manage your data centre with LANsense

### » Can your system measure real-time changes in power demands as blade server usage increases/decreases?

Nexans LANsense management platform combines information about physical and network layer connections providing a complete path between core, edge and end devices. Software instantly updates the management database when moves, unauthorised connects/disconnects are detected. It also establishes a reliable audit trail to satisfy compliance and legal requirements.

### » Can your system measure the changing power demands in real time as blade server usage fluctuates?

Nexans LANsense management tools monitor and record the power draw of each server and equipment rack down to the individual device, providing alerts through the LANsense management tool.



\* Environmental Monitoring and Access Control

### Intelligent Infrastructure Management – Control your network with LANsense

» Can your system detect real time changes in temperature, humidity and cabinet fan speed as server usage fluctuates?

Nexans environmental monitoring systems detect and report heat and moisture changes at selected spots for each equipment rack, providing status reports and trend analysis through LANsense.

» Is your system fully secure and protected against breaches and unauthorised access?

Nexans products and security expertise include managing access to servers, equipment racks, and even the entry door to the data centre. Breaches can be captured through Internet Protocol (IP) video cameras and reported as an alert to administration using the LANsense system.

» Can your system provide real-time mapping and prepare work orders for moves, additions, changes (MACs) and related system upgrades as needed?

LANsense provides intelligent infrastructure management that automatically manages many aspects of network activity in real time. It ensures connections are secure and accurately documents all connectivity. Active and passive port, device monitoring, security alerts, and management are all possible with LANsense including the preparation and documentation of work orders. LANsense software can form the basis of a configuration management database (CMDB).

# NEXANS DATA CENTRE SOLUTIONS

## Scalable, flexible, reliable.

Having a reliable, flexibly designed cabling and switching infrastructure plays a key role in meeting variable business demands and sudden challenges, which IT managers know all too well. Additionally, installing an infrastructure you don't have to upgrade every five years is of paramount importance in preparing for future challenges.

Nexans' extensive range of products and accessories are ideally suited to data centres of all sizes due to the scalable, cost-effective flexibility designed into each product and accessory.

## Solutions overview

- LANmark, a comprehensive range of copper and fibre based cabling.
- LANsense hardware and software for Intelligent Infrastructure Management.

## INFRASTRUCTURE

Nexans LANmark copper and fibre cabling minimise Data Centre disruptions, reduce recurring costs and ensure greater operational continuity for better business vitality.

## LANmark

### LANmark-Copper

Feature	Benefit
Bandwidth rich up to 1000MHz	Future proof
Shielded infrastructure	Data integrity
Extended reach up to 140m	Lower cost of ownership
Short link connections	Optimising space utilisation
High density	Low real estate cost
GG45 – Backwards compatible with RJ45	Scalability up to 40G
Robustness	Zero downtime

### LANmark-Fibre

Feature	Benefit
Multiple connections	Design flexibility
Laser optimised multimode fibre	Optimal performance
MPO parallel optics	Migration path to 100G
Pre-terminated fibre	Reduced project timescales
High density	Optimum space utilisation for SAN

## SUPPORT

### Nexans Cabling Solutions support capabilities

- Global service and support helps keep Nexans' performance driven infrastructure up and running anywhere, and in any environment.
- Valued partnerships worldwide, with a key account management approach to network and data centre design, installation, and rollout anywhere.
- Certified system warranty – when using a Nexans approved partner for professional installation and

## MANAGEMENT & CONTROL

Nexans LANsense is an infrastructure management tool providing information from the network layer to provide 100% accurate records of cable routing, connectivity and device identification, status and location.

## LANsense

### Management & Control

Feature	Benefit
Port management	Capacity planning
Interrogation	Device identity, location and status
Remote management	Ease of system administration
Event alerts	Real time notification
Moves, adds and changes (MACs)	Real time mapping

### Environmental & Security

Feature	Benefit
Access control	Rack level security
Security integration	Immediate notification and video capture
Temperature and heat monitoring	Trended data analysis
Power monitoring and control	System stability

commissioning, a comprehensive warranty guarantees parts, labour, channel performance and quality of service.

- Training to keep data centre managers and IT professionals current on constantly evolving new technologies, standards, issues and security challenges.

A trustworthy partner is one knowledgeable in data centre needs. That partner is Nexans Cabling Solutions.

## Proven performance

Data systems and networks, and the many business-critical applications they support, are so vital to successful operations that they must function reliably 100 percent of the time. From an infrastructure viewpoint, nothing illustrates this attribute better than actual businesses that chose Nexans to keep data flowing seamlessly.

Nexans delivers best-in-class cabling solutions for a complex remote data centre to ensure totally dependable operation and remote management control.



Major finance organisation (UK)

Belgium's leading telecommunications company installs Nexans' latest optical fibre technology for storage area networks and data centres.



Belgacom (Belgium)

Europe's leading provider of carrier-neutral data centre and managed services employs Nexans cabling solutions to increase the reliability and durability of its dedicated hosting facilities.



Interxion (France)

GGRZ relies on Nexans Cat.7 and fibre-optic solutions to build reliable, future-proof data centre for Westfälisch-Lippische Vermögensverwaltungsgesellschaft (WLV).



GGRZ (Germany)

## About Nexans

With energy as the basis of its development, Nexans, the worldwide leader in the cable industry, offers an extensive range of cables and cabling systems. The Group is a global player in the infrastructure, industry, building and Local Area Networks markets. Nexans addresses a series of market segments from energy, transport and telecom networks to shipbuilding, oil and gas, nuclear power, automotive, electronics, aeronautics, handling and automation.

With an industrial presence in more than 30 countries and commercial activities worldwide, Nexans employs 22,000 people and had sales in 2007 of 7.4 billion euros.

In the field of LAN Cabling Systems, Nexans Cabling Solutions offer a complete range of products and value added services providing improved reliability and reduced cost of ownership for Network Managers, together with faster installation times for installers.

In addition to LANmark physical infrastructure cabling systems, Nexans also specialises in the development Intelligent Infrastructure Management (IIM) products under the LANsense brand, including environmental monitoring and control (EMAC) devices and solutions for fully converged IP environments.

Nexans offers an unrivalled choice of LAN infrastructure solutions to a global customer based through an extensive network of regional offices and Key Account Management team.



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