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**Maritime and offshore LANs  
for integrated communications,  
process and control**

# Nexans, worldwide leader in cables and cabling systems

As a global expert in cables and cabling systems, Nexans brings an extensive range of advanced copper and optical fiber solutions to three key sectors of the economy: **infrastructure, industry and buildings.**

Its cables and systems can be found in every area of people's lives, from rolling stock and railway infrastructure to telecommunications and energy networks, aeronautics, aerospace, automobiles,

petrochemicals, windmills, medical applications, etc.

The presence of Nexans in over 65 countries gives it a full mastery of both national and international standards. Its 10 Competence Centers and International Research Center work closely with customers to constantly improve its standard range of products and technologies and to develop customized, country and industry-specific solutions.



# Copper and fiber LANs from Nexans to consolidate offshore and industrial activities

Faced with rising demand, and green concerns, the oil & gas industry is seeking to explore new reserves, reduce costs, and improve operational efficiency. Remotely-managed “smart wells,” both land-based and offshore, are a definite trend, as well as longer and deeper umbilicals. Meanwhile, the industry is forever looking for safer, more reliable and environmentally-friendly methods in extraction and processing.

Nexans provides a wide range of energy and telecom cables for prospecting, production and distribution, as well as for refineries, storage depots and petrochemical complexes, including safer lead-free energy cables. Aside from mastering installation techniques both onshore and offshore, Nexans has developed deepwater umbilicals, new protective sheathings, high-speed optical fiber solutions, and fire-performance

products, all of which are recyclable.

As an oil & gas producer, or builder of platforms and FPSO vessels, you would like to endow the process and control network with multimedia capability to consolidate onshore/offshore activities and improve the quality-of-life for crews. As a refinery operator, you need Ethernet-based processes. Whether optical fiber or copper is used, you want quick and easy installation and optimized design. You expect conformity to tough standards, high reliability, and flawless performance in terms of electromagnetic compatibility (EMC) and fire safety (halogen-free, flame-retardant).

To help you improve performance, Nexans offers **complete maritime and offshore LAN systems**, with matched components and connectivity.



**complete maritime  
and offshore LAN  
systems**

# Maritime and offshore LANs

## All-in-one: offices, living quarters, production

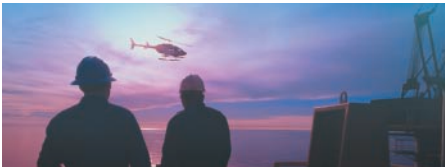


Nexans produces both copper and fiber LANs for platforms, FPSOs, ships and sea-moveable structures. In addition to Category 5 and 6 cabling,

the advanced Lanmark 7 network supports 10 Gigabits, providing full triple-play and industrial Ethernet capability. Special cable constructions mean that cables can pass safely in EMI zones (e.g. control and measuring rooms). They offer an extended lifetime and investment protection for platforms, vessels, and processing vessels. Lanmark Optical Fiber LANs use superior grades of laser-certified fibres, OM1, OM2 and OM3 compliant, supporting 10 Gigabit over longer distances. The fibers are tightly buffered, making them more resistant on the platform or in industrial environments. Halogen-free and flame-retardant versions are available for both indoor and outdoor applications.

### This Nexans solution gives you:

- **Investment protection** for forthcoming applications such as 10 Gigabit Ethernet
- **Integration** of multimedia, telecommunications, services, and process control
- **Ethernet-based automation** to bring the office and the plant closer together
- **Compliance** with international standards: e.g. ISO/IEC 11801: 2002; EN 50173: 2002; and draft ISO/IEC 24702 for industrial networks
- **Full fire safety** through halogen-free, flame-retardant sheaths
- **Custom designs** for reduced cabling and enhanced performance
- **Matched components** for easy and reliable installation
- **Worldwide support** for training, installation and maintenance
- **Marine and industry-specific products** like anti-vibration patch panels, “mud” resistant cables, etc.



**Nexans merges copper and fiber for extreme environments**

For British Petroleum’s Azerbaijan Caspian Sea Development, Nexans provided high performance cabling

solutions using CAT 7 and LSZH fiber optic cables for telecommunications and control. Currently, with Acumen Consulting and SOhome AS, Nexans is developing complete LAN packages, combining CAT 7 and next-generation optical fiber cables for hazardous and extreme oil & gas environments, FPSOs, and marine drilling projects.

# LAN Cabling Systems for the Maritime and Offshore Industries



Product families	Product family names	Standards / Specs
LAN Cables copper	<b>LANmark-7 Maritime SHF1 LSFROH</b>	<ul style="list-style-type: none"> <li>• IEC 60092-359</li> <li>• IEC 60332-3-24</li> <li>• IEC 60754-1</li> <li>• IEC 60754-2</li> <li>• IEC 61034-2</li> <li>• IEC 61156-5</li> </ul>
	<b>LANmark-7 Industrial PUR</b>	<ul style="list-style-type: none"> <li>• IEC 60332-1</li> <li>• IEC 61156-5</li> </ul>
	<b>LANmark-7 Oil&amp;Gas PVC Nitrile</b>	<ul style="list-style-type: none"> <li>• IEC 61156-5</li> </ul>
	<b>LANmark-7 Oil&amp;Gas Mud Resistant</b>	<ul style="list-style-type: none"> <li>• IEC 61156-5</li> </ul>
LAN Cables optical fibre	<b>LANmark-OF Optical fibre OM1, OM2, OM3 or OS1</b>	
LAN Connectors Copper GG45	<b>LANmark-7 Maritime GG45 Category 7</b>	<ul style="list-style-type: none"> <li>• IEC 60603-7-7</li> <li>• Category-7</li> <li>• Category-6</li> <li>• Category-5e</li> </ul>
LAN Connectors Optical fibre	<b>ST, SC, SCDuplex, LC, MT-RJ</b>	
LAN Hardware	<b>LANmark Maritime Patchpanel 19", 24 port - Vibration proofed</b>	<ul style="list-style-type: none"> <li>• Manufacturer</li> </ul>
	<b>LANmark - OF Patchpanel 19" 24/48 ports Optical fibre</b>	<ul style="list-style-type: none"> <li>• Manufacturer</li> </ul>
	<b>LANmark DIN-Rail Mount, 1 Port</b>	<ul style="list-style-type: none"> <li>• 35mm DIN-Rail</li> </ul>
	<b>LANmark Metal outlet 50x50, 2 ports</b>	<ul style="list-style-type: none"> <li>• Manufacturer</li> </ul>
	<b>LANmark Industry IP67 outlet, 2 Ports</b>	<ul style="list-style-type: none"> <li>• IEC 61076-3-106</li> <li>• IEC 24702 (draft)</li> <li>• IEC 61918</li> </ul>
Accessories	<b>Copper and optical fibre tools, patchcords...</b>	



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