

# Newsletter



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## OPTOKON Newsletter January 2024

Welcome to the latest edition of our newsletter! We are happy to share with you all the latest news from OPTOKON.

This edition of our newsletter contains a New Year's message from Mr. Štefl, CEO of the OPTOKON Group, along with information about the expansion of the OPTOKON Data Center "DATOVÉ CENTRUM VYSOČINA", the migration of its backbone network and other important milestones for the organisation; notably the celebration of the company's 33<sup>rd</sup> anniversary and membership of the European Space Agency.

The newsletter also highlights significant events including the cyber security and DSIA (Defence and Security Industry Association of the Czech Republic) workshop and visits by ambassadors from Singapore and Turkey.

We also celebrate OPTOKON receiving 2 awards - as one of the Czech 100 Best companies and Company of the year 2023 in Vysočina. This edition also includes details on new product launches and shows OPTOKON's St. Nicholas celebration with its employees.

As always, more information can be found on the OPTOKON website.



The OPTOKON, a.s. company was awarded in Municipal House in Prague for CZECH 100 BEST



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## We participated in year 2023 on 9 Exhibitions

2023 saw OPTOKON successfully attending 9 exhibitions! 2024 will see our presence at even more!



CABLEXX 2023, Cairo, Egypt



IDEF International Defense Industry Fair  
Istanbul, Turkey



Security Exhibition + Conference 2023  
Sydney, Australia

## Recent Exhibitions

### EDEX 2023

4.12.2023 - 7.12.2023, Cairo, Egypt.



ECOC 2023, Glasgow, Scotland



Konference Spojovacího vojska 2023  
Lipník nad Bečvou, Czech Republic

## OPTOKON Forthcoming Exhibitions

### WORLD DEFENSE SHOW 2024

4.2. - 8.2.2024

Riyadh, Saudi Arabia

OPTOKON Middle East booth: XE8.1 (A)

### CABLEXX 2024

28. - 29.2.2024

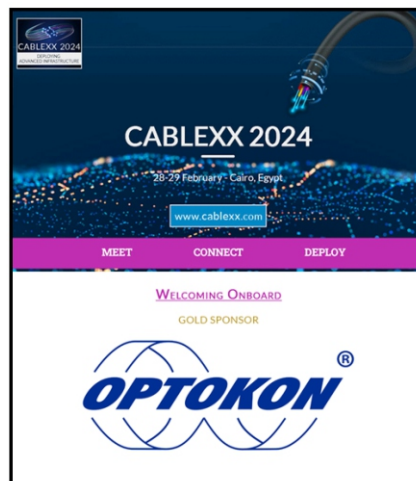
Cairo, Egypt

OPTOKON booth: G15 - **Golden Sponsor**

### DSA 2024

6. - 9.5.2024

Kuala Lumpur, Malaysia



# Company News

## A New Year Message from OPTOKON CEO



Dear customers, employees and business partners, 2023 was an exceptionally complex and demanding year. A year that will primarily be remembered for a number of mid-term crises. It was a year that for many of us challenged our values and made us reflect on our lives. We have learned to live in a relatively safe world without restrictions on our civil liberties and with a wide range and availability of various services. All this changed with the arrival of the "demographic crisis", challenging the established view of how social and economic relations function.

The consequences of these changes impacted the OPTOKON group during 2023.

Our production and financial results correspond to the challenges presented by the complex situation on the markets and is reflected in the prices of our products.

In these difficult times, OPTOKON a.s. in 2023, achieved 93% of our business plan. Though this was a shortfall of 0.5 million Euros from our anticipated revenue we can take heart from once again achieving a positive economic result.

Despite all the challenges, we received an award as the best company of the year 2023 in the Vysočina region and OPTOKON was recognised by Comenius as Czech 100 Best of 2023 in the category INVENTION - DEPLOYMENT - EXPORT - PROFIT.

I am immensely proud that, despite all the difficulties, we were able to invest in the reconstruction and modernisation of production facilities which will ensure we can continue to maintain our position in the market in the future.

Among the most significant investments was the retrofitting of our EMC-accredited test rooms. Here I must also mention the significant investment in the expansion of our cable optical route for Jihlava - Prague. The annual high level of investment is a clear proof of our efforts to secure the future of the OPTOKON Group for generations to come. It is precisely thanks to these already completed large-scale investments in the modernisation of our production technology alongside strengthening the position of our DATA CENTER VYSOČINA that our competitiveness is increasing, a necessary condition for the successful future of any business. The year ahead, when our company will celebrate 33 years since our foundation - will be marked by changes not only in the economic and social spheres, but also in the lives of all of us. Our joint efforts, mutual support and understanding can help us overcome the difficult situations that we will undoubtedly have to face this year. I believe that throughout the year we will all strive to consistently fulfil the business programs of all companies in the OPTOKON group.

Dear colleagues, I thank you for your work, effort, and support, especially those who added sacrifice and creativity to the fulfilment of their duties. I hope that we will all find positivity, peace, and well-being throughout the New Year! We are here to create, invent and protect what we created many years ago. We are here to walk the same path, at least temporarily. Our common path is not products, but what stands behind it, diligence, top-notch work, a sincere desire to improve things, to receive an adequate reward, but to remember there is also a human dimension, caring for the nearest and dearest, as well as normal human decency.

This is my vision and message for the year 2024 and I will be delighted if my thoughts find sympathy, and support in you and hope that you also share these aspirations.

I thank you all for your cooperation last year, your patience and loyalty, and I wish you and your families good health and personal satisfaction in the new year 2024.

Ing. Jiří Štefl  
General Director & CEO, OPTOKON, a.s.

# Company News

## Cybersecurity, Resilience, and Protection of Sensitive Information in the Defense and Security Industry of the Czech Republic

On November 21, 2023, the Defense and Security Industry Association organized a round table on "Cybersecurity, Resilience, and Protection of Sensitive Information in the Defense and Security Industry of the Czech Republic" under the auspices of the President of AOBP, RNDr. Jiří Hynek, and doc. Ing. Zdeněk Horák, Ph.D. The event took place at the Vysočina Data Center. The key topic of the round table was the possibilities of developing resistance against cyber attacks in the area of the defense and security industry of the Czech Republic.

In 2024, OPTOKON, a.s. plans to build shared services intended for security research and development projects. The company will be active in the field of development and will leverage tools built on the use of artificial intelligence to support its efforts.

Ing. Tomáš Müller  
ICT Director, OPTOKON, a.s.



## Czech Republic Celebrates 15 Years as a Member of the European Space Agency



This year marks 15 years since the Czech Republic joined the European Space Agency (ESA). The agency focuses on the cooperation of its members in space missions, launch vehicles, research and many other areas in which Czech companies, research institutes and academic entities also participate. Czech companies and academic institutions have been or

continue to be involved in more than 600 high-technology projects in ESA; more than 60 Czech companies are directly involved in ESA projects and dozens more have an important role in supply chains. More than 20 Czech academic institutions and centres focused on space research also cooperate with ESA.

OPTOKON a.s., a Czech company with over 30 years of experience in the field of information and communication technologies, is a member of the ESA and participates in several projects with its products.

<https://www.czechspaceportal.cz/catalog/optokon-a-s/>



The Czech Republic's participation in the Solar Orbiter mission, launched in February 2020, is particularly significant. Czech research organizations and companies participated in five projects on four scientific instruments, and other Czech companies won contracts to build the spacecraft itself. The Czech Republic also participated in the JUICE mission, a probe to Jupiter launched in April 2023. Czech research organizations participated in two instrumentation projects, and a number of Czech companies won contracts for the project.

The Czech Republic's participation in ESA's R&D programs is not limited to these two missions. Czech scientists are already involved in nearly all of the ESA's planned scientific missions, such as the gravitational observatory LISA, the X-ray telescope ATHENA, the comet hunter Comet Interceptor, and the PLATO and ARIEL missions, which will study planets outside our solar system.

The ESA is an international organization dedicated to cooperation in space research and the development of space technologies and their application in applications.

## Company News

### DATOVÉ CENTRUM VYSOČINA

The company OPTOKON a.s. in cooperation with its subsidiary OptoNet Communication spol. s r.o. are finishing the connection to the backbone infrastructure of the strategic partner T-Mobile Česká republika a.s. by building a new backbone optical infrastructure Jihlava - Prague and Jihlava - Chvalovice/Hatě.

As part of the construction of the new backbone infrastructure, we are connecting the VYSOČINA DATA CENTRE to international connectivity and building a robust independent BackBone.

We are preparing interconnections with our partners in Germany, Austria, Poland and Slovakia so that DATA CENTRE VYSOČINA will be an interesting partner for operators and commercial customers in view of the ever increasing requirement for diversification of primary connectivity in terms of cyber security.

We are also increasingly introducing modern software tools for OSMS management and protection of the FOTAS linear optical path into optical infrastructure expansion projects.

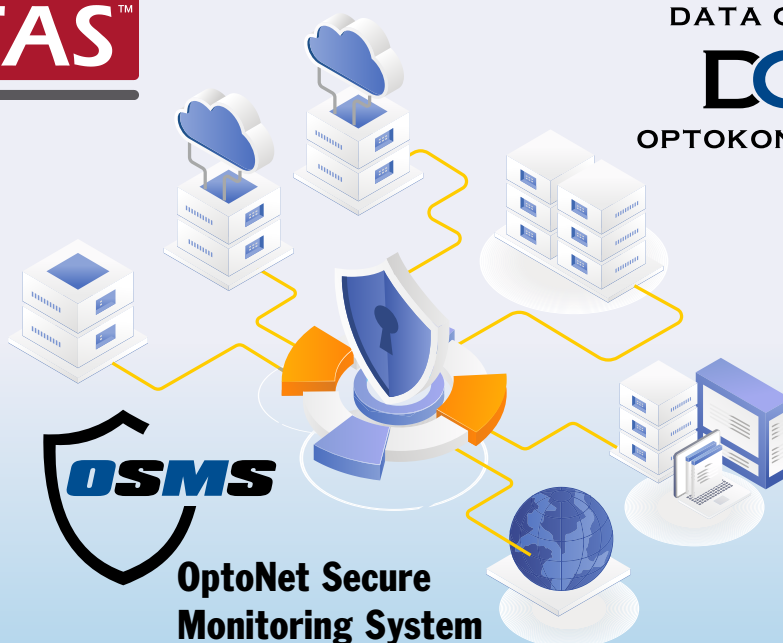
# INFRASTRUCTURE SOLUTION

- SMART SECURITY FOR EVERY DATA CENTRE

..... WHERE INNOVATIVE END-TO-END SOLUTIONS ARE DESIGNED



DATA CENTER  
**DOS**<sup>®</sup>  
 OPTOKON SYSTEM



OptoNet Communications spol. s r.o. is also working on the migration of customers to the VYSOČINA DATA CENTRE from the existing premises of TH OPTOKON. This is a complex sophisticated process combining IT management with NET fibre optic architecture that Optonet Communication spol. s r.o. has generated over more than 15 years of existence. We focus on our own customers as well as on meeting the demanding requirements of operators. The use of OSMS and DOS-DATA CENTER OPTOKON SYSTEM tools is a common practice in technical solutions today.

Ing. Rostislav Prosecký  
 Director  
 OptoNet Communication, spol. s r.o

## Company News

### Visits by ambassadors from Singapore and Turkey,

In November, the Ambassador of the Republic of Singapore, H.E. Tan Soo Khoon, visited Jihlava and OPTOKON Headquarters. And in December, Ambassador of the Republic of Turkiye, H.E. Egemen Bağış together with the business council Mrs. Berat Demirci Cörüt visited the production facilities of OPTOKON a.s. in Jihlava and Pelhřimov where they saw the production and testing of optoelectronic equipment and optical cables. At the same time, they also visited a modern campus with the most advanced operational and cyber security - the Vysočina Data Center, which is part of the "OPTOKON Group".

As part of the program prepared by OPTOKON, the representative of Turkiye, Mr. Egemen Bağış, participated in a joint working lunch with Vítězslav Schrek, the governor of the Vysočina Region, the rector of the Jihlava Polytechnic University Zdeněk Horák and the chairman of the board of the Vysočina Region Chamber of Commerce, Jaroslav Huňáček. During the joint discussion, relations between universities and business cooperation were mainly addressed.



Ambassador of the Republic of Singapore, H.E. Tan Soo Khoon



Representative of Turkiye, H.E. Egemen Bağış and Mrs. Berat Demirci Cörüt

# Company News

## OPTOKON GROUP Evolution: Bridging Tradition with Innovation in Optical Connectivity



OPTOKON, since its inception in 1991, has undergone significant development, blending tradition with innovations in the field of optical connectors. The company's origins are linked to the acquisition of the optical connector manufacturing program from TESLA Jihlava, establishing the groundwork for OPTOKON's history.

During its initial years, the company closely collaborated with the Japanese partner SEIKO INSTRUMENT and became a distributor of products from the Canadian company JDS FITEL. This collaboration strengthened its market position and facilitated rapid growth. In 1995, the company moved to its dedicated facility, commencing in-house production of optical connectors.

A crucial juncture in OPTOKON's history unfolded in 1996 when it became a subsidiary of the American company METHODE ELECTRONICS, Inc. and obtained ISO 9002 certification. Subsequently, in 1997, an independent

calibration laboratory with ISO 9000 certification was established, underscoring the company's commitment to quality and standards.

Over time, the company continued to fortify its market position. In 2001, it became a key member of the Fiber Optics Standardization Council CENELEC, highlighting its professional standing in the industry. The expansion of manufacturing capacities in 2002 and NATO approval for its products in the same year laid a robust foundation for further growth.

In 2006, OptoNet Communication Ltd. was established, focusing on data networks and optical links, bolstering the group's product portfolio. The subsequent year saw the expansion of OPTOKON Group with branches in Central and Eastern Europe.

In 2011, OPTOKON transitioned into a wholly Czech company and commenced expansion into the Middle East. In 2015, facilities and calibration laboratories were set up in Malaysia. Concurrently, the company diversified its operations into optical cable production through OPTOKON Kable Ltd.

The year 2018 marked a significant milestone as the company obtained accreditation for its testing department according to the ČSN EN ISO/IEC 17025 standard, highlighting its high level of technical competence. In 2019, OPTOKON expanded into the Turkish Republic through OPTOKON Elektronik Limited Şirketi.

In 2022, the company inaugurated the VYSOČINA DATA CENTER, a pivotal move to fortify infrastructure and support the development of data services. Simultaneously, a portion of production was relocated to newly established companies in Saudi Arabia under the names OPTOKON Middle East and OPTOKON Pacific in Malaysia.

In 2023, the company took another strategic step toward strengthening its international presence by establishing a representation in Australia. This initiative underscored the company's commitment to global market expansion and reinforced its ability to operate and innovate in various parts of the world.



Our first exhibition in Brno, Czech Republic, 1992

# Company News

## Czech 100 Best and company of the year 2023 in Vysočina



ČESKÝCH 100 NEJLEPŠÍCH

The company saw a highly successful conclusion to 2023. We were delighted to be elected Company of the Year for the Vysočina region in 2023. The announcement of this prestigious award took place on October 12, 2023 at a ceremony, in the beautiful castle in Třešť. This award was not only an enormous source of pride but also an appreciation for our work and effort across the company.

A few weeks later, another moment of recognition followed when on December 1, 2023, at the Municipal House in Prague, we received the prestigious "Czech 100 Best" award in the categories of **Invention, Deployment, Export, and Profit.**



These awards are the result of the hard work and dedication of the entire OPTOKON, a.s. team. Both prestigious awards were proudly accepted by Ing. Jiří Štefl, CEO & Chairman of the company. His vision and leadership have not only brought recognition to our company but also positioned it among the best in the



Czech Republic. The "CZECH 100 BEST" competition aims to identify, select, showcase, and publicly honor Czech companies, businesses, or entities from various economic sectors that achieve outstanding, extraordinary, or notably positive results on a national scale.

In 2023, OPTOKON, a.s. was honored in the categories of Invention, Deployment, Export, and Profit. The company specializes in developing and manufacturing optical components and systems. Substantial investments in research and development have led to the creation of innovative products that find successful applications in the market.

The Czech 100 Best competition is a significant annual event that recognizes the top Czech companies. The award is a prestigious acknowledgment of companies' success and contributions to the Czech economy. We are incredibly proud to have become the Company of the Year for the Vysočina region and to be among the Czech 100 Best companies nationwide. These accolades strengthen and motivate us for further innovation and development. We are ready to face new challenges and actively contribute to the future of the Czech industry.





# Company News

## OPTOKON's St. Nicholas Day

The Mikuláš tradition is a popular pre-Christmas celebration in the Czech Republic, which takes place on December 5<sup>th</sup>, the eve of St. Nicholas Day.

During the celebration, Mikuláš walks the streets accompanied by an angel and a devil. The angel represents good and the devil represents bad. Mikuláš asks the children whether they have been good during the past year. After reciting a poem or song for Mikuláš, the angel and the devil, good children receive treats such as candies, fruits, nuts, or toys, which are given to them by the angel. Bad children receive lumps of coal or potatoes from the devil. This tradition is an integral part of the pre-Christmas festivities in Czech culture, fostering a playful yet moral lesson for children regarding their behaviour.



As a tradition at OPTOKON, staff are given gifts for themselves and their families to help the celebrations along. On Monday, December 6, a ceremonial meeting of OPTOKON employees took place, including employees of the subsidiaries OptoNet Communication and OPTOKON Kable. In the hall of the OptoNet training center, General Director Jiří Štefl evaluated the ending year, highlighting the year's successes and presenting areas where there is room for improvement. After the discussion with the staff, small Mikuláš gifts were distributed.

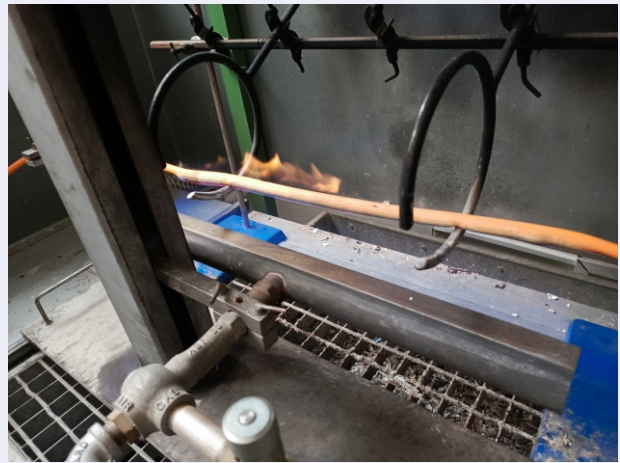


# Company News

## NEW FIREPROOF OPTICAL CABLE

### OPTOKON come to the market with a new fireproof optical cable OPK-U-DSTF-24(24x0,25)FFHGHMH

At the end year of 2023, we had a new type of cable tested, designed for use in demanding environments. Our manufacturing plant, OPTOKON Kable Co., Ltd., s.r.o., cooperates with the Faculty of Electrical Engineering of Czech Technical University Prague on the development of this cable. In December 2023, the first stage of testing took place at the accredited workplace of EZÚ PRAGUE. The cable successfully met all requirements for fire resistance and flame-retardant according to EN 60331 and 60332 standards. The construction of this new cable has been designed so that the cable has a high resistance to fire. Another feature of the new cable is good flexibility and low weight. After completion of development, the cable will be particularly suitable for use, for example, in power plants all types.



# New Products

## HMA-J1 Series connector

The OPTOKON HMA-J1 connector, a medium size „Expanded Beam“ single channel connector is designed for connection of the nodes of tactical network by the help of cables with optical fibers. The used expanded beam technology preserves all advantages of signals transmission through the optical lines in field harsh environmental conditions. Additionally to military optical networks the HMA-J1 is suited for a vast array of applications, like heavy industry connections, petrochemical application, broadcasting temporary optical lines.

The innovative designs ensure its ability for deployment in the toughest environments where high performance and total reliability are critical. Benefiting from expanded beam technology the precision optical alignment system creates immunity from water, mud, dust, oil and other contaminants. The HMA-J1 Hermaphroditic coupling eliminates the need for adaptors and male and female mating halves.

[The datasheet can be downloaded here](#)



## HMA-S Series connector - update

The OPTOKON HMA-S connector series, a large size „Expanded Beam“ connector is designed for connection of the nodes of tactical network by the help of cables with optical fibers. The used expanded beam technology preserves all advantages of signals transmission through the optical lines in field harsh environmental conditions. Additionally to military optical networks the HMA-S is suited for a vast array of applications, like heavy industry connections, petrochemical application, broadcasting temporary optical lines. The HMA-S connector functionality is based on MIL standards.

The innovative designs ensure its ability for deployment in the toughest environments where high performance and total reliability are critical. Benefiting from expanded beam technology the precision optical alignment system creates immunity from water, mud, dust, oil and other contaminants.

[The datasheet can be downloaded here](#)



## TFOCA patchcord Physical Contact Hermaphroditic Connectors

The TFOCA optical modules are designed for connection of the nodes of tactical network by the help of cables with optical fibers. The used enhanced technology preserves all advantages of signals transmission through the optical lines in field harsh environmental conditions.

The connector includes an optical interface with four standard 2.5 mm ferrules with solid core alignment sleeves. The front insert can be easily removed for field maintenance and cleaning.

The TFOCA Hermaphroditic coupling eliminates the need for adaptors and male and female mating halves. There are two different types of TFOCA connection modules:

- a) LD type military tactical cable with TFOCA plugs at both sides
- b) Hybrid connection module TFOCA to standard fiber optic connectors (FC, SC, ST, LC, ...)



[The datasheet can be downloaded here](#)

# New Products

## LMSW-82T L2/L3 managed gigabit switch

Switch has robust and compact design, built to withstand harsh environmental conditions and rough handling. It offers L2/L3 functionality, featuring 2x WAN FO – HMA-J connectors and 8x LAN ports equipped with PoE and D38999 multi-pin connectors. Adhering to standards such as IEEE 802.1p, IEEE 802.1Q, 802.3az, 802.3af, and 802.3at, it provides 1G uplinks and downlinks. With WAN comprising 2 ports of 1G, either copper or fiber (HMA), and LAN including 8x 10Base-T/100Base-TX/1000Base-T, the device ensures PoE availability across all LAN ports. Additionally, it operates on a 20 – 40 VDC power supply.



- Robust compact design resistant to harsh environmental conditions and rough handling
  - L2/L3 functionality
  - 2x WAN FO – HMA-J connector
  - 8x LAN with PoE, D38999 multi-pin connectors
  - Standards IEEE 802.1p, IEEE 802.1Q, 802.3az, 802.3af and 802.3at
  - 1G uplinks, 1G downlinks
  - WAN – 2 ports of 1G, copper or fiber (HMA)
  - LAN – 8x 10Base-T/100Base-TX/1000Base-T
  - PoE on all LAN ports available
  - 20 – 40 VDC power supply

For more information contact our sales department at [SALES@OPTOKON.COM](mailto:SALES@OPTOKON.COM)

## LMSW-28M Ruggedized Gigabit Ethernet Layer 2 Managed PoE Switch

**8x WAN 100/1000Base-X FO HMA**  
**2x LAN 10/100/1000Base-T**

PRELIMINARY

The LMSW-28M is Layer 2 military grade managed switch with 8x Fiber optic HMA-J ports 100M/1G Ethernet and 2x 10/100/1000Base-X UTP ports with PoE+ functionality that provides stable and reliable Ethernet transmission. The LMSW switches are designed and manufactured to meet strict requirements for ruggedness, reliability, and security in military applications. They have features such as advanced security protocols, redundant power supplies, and shock and vibration resistance. Layer 2 managed switches are network devices that operate at the Data Link Layer (Layer 2) of the OSI model and are used to connect multiple network devices together.

The LMSW-28M series models can provide excellent data optical network performance and rugged design.

The switch is able to fit all the common DC power systems. The switch operates in wide operating temperature range - 40 to +70 °C. The switch can operate as stand alone device or in addition the 19" brackets allow switch installation into 19" rack.



For more information contact our sales department at [SALES@OPTOKON.COM](mailto:SALES@OPTOKON.COM)

# New Products

## OPTOKON EXPANDING PRODUCTION OF LEMO PRODUCTS



OPTOKON, a leading provider of optical fiber communication solutions, is officially certified as a LEMO partner, expanding its portfolio of high-quality connectors and cabling systems. This partnership enables OPTOKON to offer its customers in the Czech Republic, Slovak Republic, Turkey and Saudi Arabia the unparalleled quality, reliability, and versatility of LEMO products.

With this certification, OPTOKON reaffirms its commitment to innovation and excellence, positioning itself as a trusted partner in the broadcasting industry. By providing access to LEMO's cutting-edge connectors and cabling solutions, OPTOKON empowers its customers to achieve their broadcasting goals with unmatched performance and reliability.

This strategic collaboration further strengthens OPTOKON's presence in the broadcasting market, enabling it to cater to the specific needs of broadcasters and content providers. The combination of OPTOKON's expertise and LEMO's high-end technology ensures that customers can rely on OPTOKON to deliver the solutions they need to excel in their endeavors.

As OPTOKON continues to pursue innovation and quality, this partnership with LEMO marks a significant step towards achieving its strategic objectives in the broadcasting market. With LEMO's support, OPTOKON is well-equipped to provide customers with the industry-leading solutions they need to thrive in the ever-evolving broadcasting landscape.

**LEMO connectors are used in medical, industrial, audio/visual, telecommunications, military, scientific research and measurement applications.**



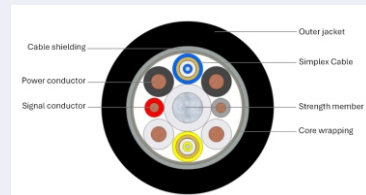
### OPTOKON and LEMO SOLUTION

for broadcast & audio/video applications



[Download brochure](#)

OPTOKON cable that meets all LEMO requirements



[Download datasheet](#)

