OPTOKON®

NEWSLETTER

December 2025

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OPTOKON GROUP

OPTOKON Newsletter December 2025

Welcome to the **December 2025 edition** of our newsletter. This issue brings a look at our key moments of the year, including the **2025 Dubai Airshow** and other exhibitions such as EDEX in Egypt, SIDEC in Slovenia and WAM in Australia, where we presented our rugged technologies.

We also share a **message from our CEO** reflecting on 2025 and offering an outlook for 2026.

We were glad to meet students at the 2025 JobStart fair at VŠPJ and introduce career opportunities at OPTOKON. Our team also enjoyed celebrating St. Nicholas Day at OptoNet to end the year in a festive mood.

Thank you for your continued support. We wish you a wonderful holiday season and invite you to visit our website for more news.

OPTOKON Recognized in Key Industry Reports

We're pleased to share that OPTOKON has been featured in several recent global market reports, including the **Bare Fiber Adapter** Market Report, the annual **LC Adapter** Report, the global **Dense Wavelength Division Multiplexers** study and the **Rack Mount ODF** Market Report.

These mentions reflect our focus on precision, innovation and dependable performance. As demand for advanced fiber optic components grows, OPTOKON remains committed to supporting telecom networks, data centers and industrial applications with high-quality, reliable solutions.

In this issue

Message from the Director

Dear colleagues, valued business partners, and friends of OPTOKON,

As the year draws to a close, I would like to express my sincere gratitude for your work, dedication, support, and the strong sense of unity that has accompanied us throughout 2025. Each of you has contributed to OPTOKON's continued growth, strengthening our international position and expanding our technological and production capabilities.

The end of the year is always a moment to pause – to reflect, take a breath, and then step forward again. I regularly write a few words for our company newsletter, but this year I feel an even stronger need to highlight one message: **thank you**.

Thank you for your work, your trust, and your commitment to keeping our shared direction, even when the path has been challenging.

OPTOKON is, above all, its team of people. And thanks to you, we were able to grow, develop, and move our vision forward once again in 2025. This past year across the entire OPTOKON Group has been marked by expanding our capabilities, strengthening our stability, and deepening cooperation between teams across disciplines and locations.

We expanded our development activities and established a new application development center in Prague, while our system development in Jihlava continues to grow. This allows us to respond to customer needs more rapidly and flexibly, offering solutions that are truly tailored to specific requirements.

Behind every achievement stand not just technologies, but people – their ideas, expertise, and perseverance. That is the greatest value OPTOKON possesses.

A major milestone of 2025 is the launch of the **DURECO research project** in cooperation with the Polytechnic College of Jihlava. This initiative connects academia, industrial practice, and the next generation of engineers. Its results will not remain in theory – they will be directly implemented into OPTOKON's development and production, helping us set new standards in optical technologies, structural optimization, and modern manufacturing processes.

Our international activities also continued to grow – in North America, in the Asia-Pacific region through OPTOKON Pte and OPTOKON Pacific, and in the Middle East via OPTOKON Middle East in Riyadh.

Among the key milestones of this year is the integration of **VARER SAVUNMA ve HAVACILIK SAN. A.Ş.** into the **GOLDENJEST INTERNATIONAL** holding group, of which OPTOKON is a part. This brings new synergies, expanded production capabilities, and opens the door to further projects in the field of modern communication and defence systems.

The year 2025 also marked the gradual strengthening of **OptoNet Communication** within the activities of the **VYSOČINA DATA CENTER**. This further solidifies the technological and operational cohesion of our group and supports our development as a unified, strong, and modern infrastructure ecosystem – both regionally and internationally.

Whether we speak about development, production, testing, or system integration, one principle remains unchanged:

OPTOKON delivers reliable technologies.

Every product, every system, and every decision carries our responsibility and the imprint of our history. At the same time, each step leads us toward a future we do not merely observe – we actively create it.

In 2025, we celebrate 35 years of OPTOKON. And as we enter the year 2026, we do so with the following motto:

"With precision we create the future.
With reliability we protect the world.
With innovation we push boundaries."

I would like to wish you a **Merry Christmas full of peace, health, and comfort**, and a **New Year 2026 filled with optimism, energy, and new opportunities**.

I believe that together, we will enter the upcoming year strengthened and prepared for new challenges.

Ing. Jiří Štefl
CEO & Chairman of OPTOKON Group

The visualization above shows how the new OPTOKON production building will look once completed, fully integrated into the existing headquarters and designed to support future growth and advanced manufacturing.Construction is planned to be completed in Q1, 2026.

OPTOKON Celebrating St Nicholas Day

OPTOKON celebrated St. Nicholas Day at OptoNet with a warm and festive gathering for our team. The afternoon offered good food, a cheerful atmosphere, and a chance to slow down together before the end of the year.

The celebration began with a **speech from our CEO, Mr. Jiří Štefl**. He reflected on the achievements and milestones of 2025, highlighting the strong cooperation across our teams and the successful projects completed throughout the year. He also shared his outlook for 2026, focusing on continued growth, new opportunities, and our ongoing commitment to innovation and quality. His message brought a sense of pride and motivation for the upcoming year.

A memorable part of the event was the **visit of Mr. Jaroslav Hájek**, a respected songwriter from the Vysočina region and a well-known figure in local culture. Throughout his long creative career, he has written hundreds of songs, many dedicated to Czech towns and villages, which earned him **national recognition and a Czech record**. His work has been performed by leading brass bands and has become a valued part of regional musical heritage. His presence added a **unique cultural touch** to the celebration and was warmly welcomed by our team.

The afternoon offered time to meet colleagues, share conversations, and enjoy the holiday spirit in a relaxed environment. It was a meaningful way to close the year and appreciate the efforts of everyone who contributes to the success of OPTOKON.

We thank all our employees for their dedication and hard work throughout 2025. We wish everyone a peaceful holiday season and a joyful start to 2026.

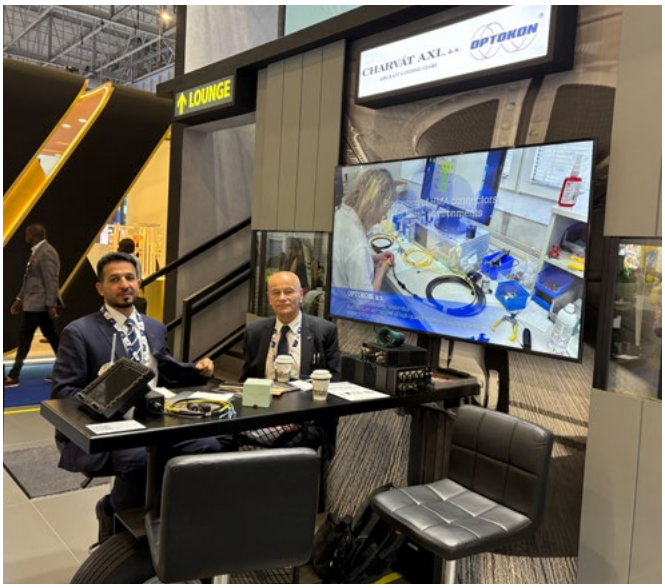
Successful Participation at the Dubai Airshow 2025

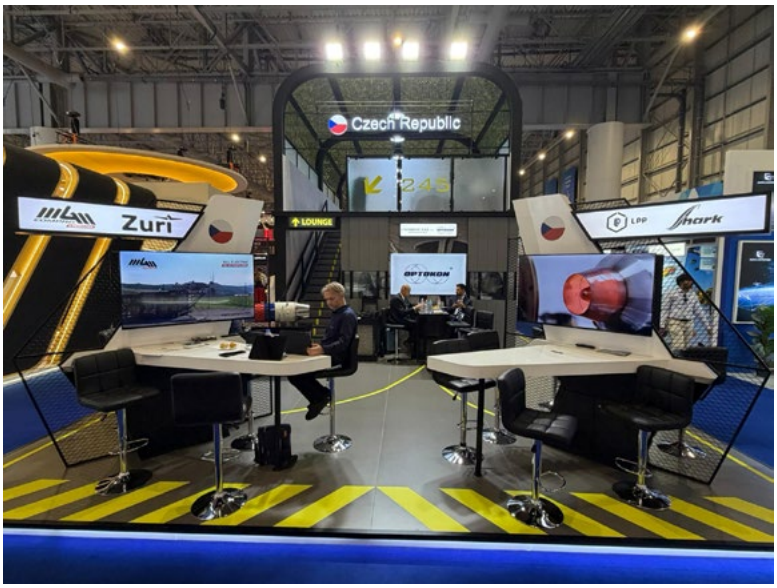
OPTOKON enjoyed highly productive days at the Dubai Airshow 2025, where we exhibited at the **Czech Republic Pavilion, Stand 245F**. The Czech organizer, ALKP – Asociace leteckého a kosmického průmyslu ČR, prepared an impressive national **booth designed in the shape of an aircraft**. This unique setup provided an excellent platform for presenting OPTOKON solutions for aviation and mission-critical applications.

Throughout the event, we met with l**eading aerospace and defence companies** from around the world. These meetings allowed us to discuss future cooperation opportunities and explore possible integration of our rugged displays, radiation detection sensors and mission-critical systems into advanced aviation projects.

The fair also served as a great environment for **strengthening existing relationships** and establishing new ones across the global aerospace community.

We **extend our sincere thanks** to all partners, visitors and the Czech team for their support and for the many inspiring discussions that made this year's participation a success.





Notable Exhibitions Attended

JobStart 2025,
Jihlava, Czech Republic

EDEX 2025,
Cairo, Egypt

IndoPacific 2025,
Sydney, Australia

Other attended exhibitions: SIDEC 2025 in Slovenia, WA Mining and MILCIS 2025 in Australia

EDEX 2025,
Cairo, Egypt

IndoPacific 2025,
Sydney, Australia

OPTOKON Named a Finalist in the 2025 Czech Exporters Awards

OPTOKON has been nominated for the 2025 Czech Exporters Awards and has been selected as one of the finalists in the sixth year of this nationwide project. The program highlights successful Czech companies that excel in international markets and demonstrates the strength, innovation and resilience of domestic exporters.

This year, 140 purely Czech companies applied for the competition, each with more than twenty percent of their revenue coming from exports. **From these applicants, 96 finalists were chosen** based on strict criteria. Together, the finalists employ more than eleven thousand people and last year exported goods and services worth billions of Czech crowns. Their combined turnover reached 58 billion CZK.

According to Helena Kohoutová, founder of the project and the Helas Business Platform, these successful exporters serve as an inspiration to companies across the country. The awards are open to small, medium and large businesses. This year, 78 family-owned companies took part, and 28 firms joined the competition for the first time.

Who Could Participate

Eligible companies had to meet several requirements. They must be Czech-owned with no foreign capital, have an annual turnover above ten million CZK, keep double-entry accounting for at least four years, and generate at least twenty percent of their revenue from exports. The winners were selected based on financial performance evaluated through rating and scoring, along with the strength of their business story.

Finalists were also recognized within size categories: small companies with turnovers up to 100 million CZK, medium companies between 100 and 500 million CZK, and large companies with turnovers exceeding half a billion CZK. Additional special awards were presented, including the Award for Greatest Potential, the Responsible Business Award and the E-commerce Award.

Exporters as Drivers of the Czech Economy

For an open and export-driven country like the Czech Republic, strong foreign trade is essential. Despite global instability, Czech exporters continue to demonstrate resilience and contribute significantly to national economic and social stability. According to the project's organizers, every nominated company plays an important role in maintaining this stability and showcases the strong foundations of Czech business.

A vital part of the Helas Business Platform is the connection of companies that participate in the Czech Businesswomen Awards, the Czech Leaders Awards, the Czech Exporters Awards and the Helas clubs. The shared goal of the platform is to build a proud Czech business community.

Project DURECO
Advancing Reliability in Extreme Conditions

Project DURECO is a s**trategic partnership between the College of Polytechnics Jihlava (VŠPJ) and OPTOKON, a.s.**, aimed at **developing advanced research and testing capabilities** for components and systems designed to perform in the **most demanding environments**. These include conditions with high pressure, vibrations, impacts, temperature fluctuations, electromagnetic interference, and radiation.

The project focuses on **understanding the limits of durability and reliability**, exploring why and how components fail, and developing new materials, designs, and technologies that extend their operational life. By integrating expertise from materials engineering, optoelectronics, sensor systems, data analytics, and artificial intelligence, **DURECO is creating a modern research infrastructure** that includes laboratories, simulation environments, and specialized testing equipment.

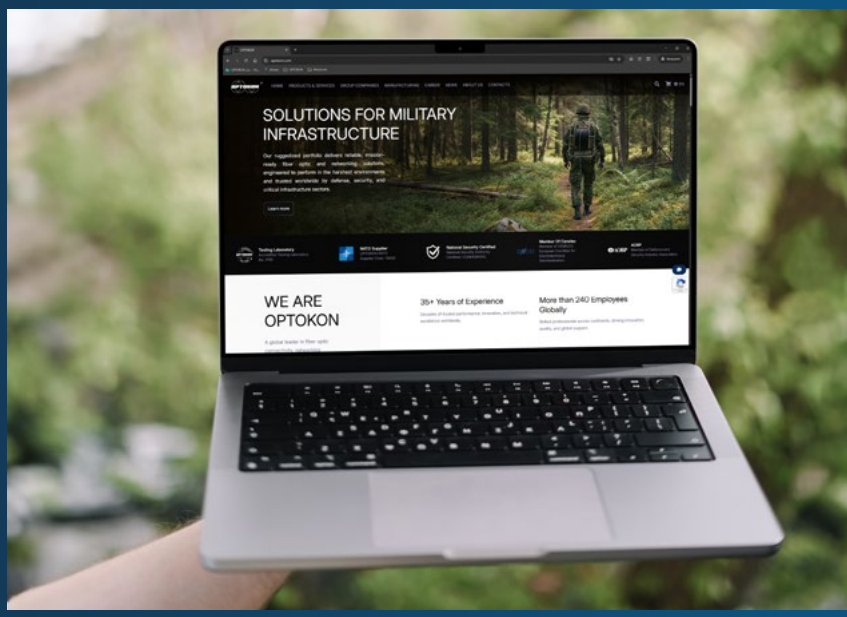
This infrastructure allows detailed measurement, analysis, and prediction of the performance of technologies used across aviation and space, military and emergency systems, high-demand data and optical networks, energy and transport infrastructure, and **industrial 4.0 technologies**.

DURECO provides critical insights into component performance under extreme conditions, helping engineers optimize designs and materials for reliability and safety.

OPTOKON brings **decades of industrial expertise in optical and optoelectronic solutions**, ensuring that research findings can be applied directly to real-world technologies. By **combining academic research with practical industry knowledge**, DURECO accelerates innovation and creates components and systems that can withstand the harshest operational challenges.

The project represents a significant step forward for both science and industry, strengthening the region's research capabilities while providing technologies that make critical infrastructure and advanced systems safer, more reliable, and more resilient.

New Unified Website for OPTOKON Group



OPTOKON Group is entering the next stage of its digital transformation with the launch of a unified online presence under the central domain **WWW.OPTOKON.COM**, which now serves as the official platform for all our subsidiaries and branch offices.

By consolidating our websites into **one integrated environment** with connected subdomains, we can respond to each customer more quickly, provide deeper technical support, and offer additional assistance and expertise across the entire group. The new site presents our subsidiaries, partners, distributors, and key European Union projects in a clear and structured way, helping visitors understand the full scope of our capabilities and international activities.

In parallel, we are expanding our social media ecosystem: LinkedIn remains our primary professional channel for regular updates on company activities, projects, and solutions, while our newly created **OPTOKON Group Instagram profile** is focused not only on a younger audience, visually showcasing our achievements, awards, and success stories.

Together, the centralized website and differentiated social media channels strengthen our visibility, enhance customer communication, and support the long-term growth and strategic development of the OPTOKON Group.

OPTOKON at the Cyber Forces Conference

OPTOKON has been represented at the conference held under the auspices of the Commander of the Information and Cyber Forces in November.

We participated onsite and showcased our secure communications and cyber defense solutions.

Key themes we engaged with:

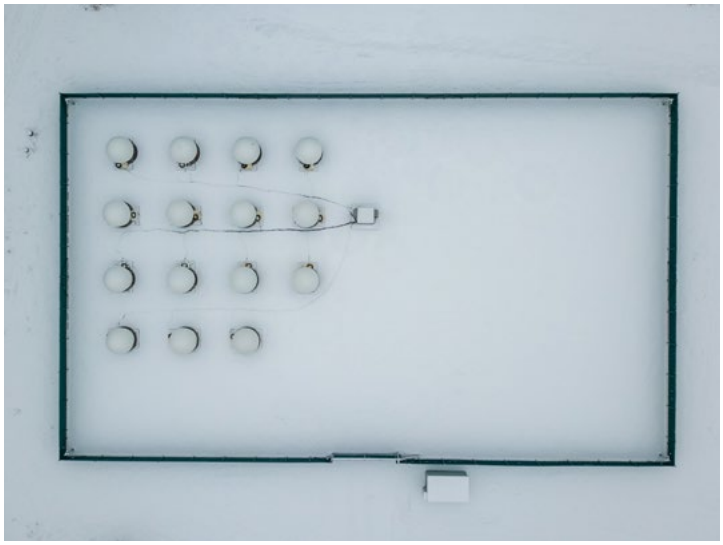
- Future cyber threats and new forms of hybrid warfare
- Military capabilities to counter cyber and information threats
- Emerging and disruptive technologies in cyber defense and information operations

OptoNet Launches the Czech Republic's First Starlink Hub

One of the most important **recent milestones for OptoNet Communication**, a member of the OPTOKON Group, is the completion of the construction, installation, and launch of a **new polygon GATEWAY SIDE (GWS) Jihlava** for satellite antennas connectivity, the **only infrastructure of its kind currently operating in the Czech Republic**. This unique project has been realized in c**lose cooperation with QUANTCOM and SpaceX and its Starlink satellite network**.

OptoNet Communication draws on its broader regional and national **technology footprint**, including access to advanced data centre facilities and its own expanding fiber-optic backbone that newly links the GWS location with key infrastructure hubs.

This positions OptoNet Communication, as part of the OPTOKON Group, as a **key technology partner** and further strengthens our long-term role in both national and international infrastructure projects.



New Addition to OPTOKON FTTH Solutions: Shuttered SC Patchcords

OPTOKON has expanded its **FTTH product offering** with patchcords equipped with SC connectors featuring an integral shutter mechanism. Designed for home network applications, these connectors combine user safety with reliable performance.

The shutter protects against contamination and accidental damage during handling, while also providing eye safety by automatically blocking laser radiation when disconnected. This makes them particularly suitable for environments where end users may have limited technical training.

With compliance to **IEC 61754-4 standards**, high mechanical resistance, and excellent transmission parameters, OPTOKON shuttered SC patchcords ensure secure and dependable connectivity for modern FTTH installations.

Successful completion of the project: High-density cabling for data centers + testing technology + multi--fiber connector assemblies

OPTOKON, in cooperation with **ČVUT (Czech Technical University in Prague) and OPTOKON Kable**, has successfully completed the **R&D project DOS** focused on high-density optical cabling and related technologies for data centers.

The key outcome of this development project is a new, **special DOS cable design with 96 optical fibers in a single cable.** For improved organization and protection, the fibers are divided into 6 separate sub-units, each containing 16 fibers. This design responds to data center requirements for maximum density, clear installation, and high operational reliability when building and expanding infrastructure, while also meeting strict safety requirements. From the reaction-to-fire perspective, the Distribution Cable for Data Center Cable Systems is classified as Dca.

The project also included the development of testing technology for these multi-fiber solutions. **OPTOKON developed optical testers** such as the PM-240-SNMT and others, e**nabling the testing of 16 fibers in a single measurement cycle**. This significantly increases measurement efficiency and reduces the time required to verify cable assemblies. Building on this development, an output was also defined in the form of a handheld tester designed for testing the properties of optical cables in data centers.

The DOS project further covered the expansion of connector assemblies and production capabilities. **In cooperation with the Japanese company SENKO**, OPTOKON developed the technology and launched production of patch cords and pigtails for these specialized multi-fiber connectors.

As **the first reference data center using this newly developed technology** and the new connector type from SENKO, the **Vysočina Data Center** was presented. The project outcome is a complete data center platform that combines the high-density cable, compatible connector assemblies, and efficient testing procedures into one practically deployable solution.

OPTOKON Brings High-Density DOS® Cabling System with SENKO SN-MT Connectivity to the Middle East

OPTOKON has entered the **fast-growing Middle East data center market** with its D**OS cabling system**, which is powered by **SENKO's SN-MT multi-fiber technology**. This expansion supports the region's rapidly increasing need for high-density, scalable, and installation-friendly optical infrastructure as new data centers are built to handle global cloud and AI workloads.

The Middle East has become one of the **most dynamic data center regions in the world**. Major digital transformation programs, national investments, and the arrival of hyperscale cloud providers are driving a strong demand for high-performance connectivity. Countries such as the United Arab Emirates, Saudi Arabia, and Qatar are building digital ecosystems at record speed, making fiber infrastructure a critical foundation.

To support this growth, OPTOKON is introducing its **DOS-SN-MT16 system,** designed around pre-terminated trunk cables and modular patch panels that significantly shorten installation time. Each 96-fiber trunk cable is divided into six tubes terminated with SN-MT16 connectors, removing the need for splicing and enabling true plug-and-play deployment.

At the rack level, OPTOKON's 1RU patch panel delivers **up to 3,456 fibers using 54 adapter positions**, placing it among the highest-density platforms available. Combined with a wide selection of fanout assemblies for LC, SN, and MPO connectivity, operators gain full flexibility for both new builds and infrastructure upgrades.

Beyond cabling, OPTOKON brings decades of expertise in fiber optic testing. The company offers a full portfolio of test tools, from power meters and light sources to advanced multifiber testers. These instruments ensure accurate validation and long-term monitoring of networks using LC, MPO, and modern SN-MT connectors.

"The growth of data centers in the Middle East is a natural step in the region's digital evolution. The demand for high-density, scalable connectivity is simply unavoidable," **said George Štefl, Group Manager and Head of Marketing.** "OPTOKON brings the technology and experience to make this journey smoother and more reliable."

SENKO shares this commitment. "We are excited to collaborate with OPTOKON in developing the Middle Eastern market," **said Phil Ward, Director of Strategic Marketing at SENKO.** "Together we are bringing a high-density, future-ready connectivity platform that aligns perfectly with the region's rapid digital growth."

SENKO's SN-MT technology provides the densest multi-fiber connectivity on the market, supporting 8-, 16-, and 32-fiber formats and enabling next-generation transceiver platforms such as QSFP-DD, OSFP, and future 1600G modules.

With this launch, OPTOKON strengthens its position as a key contributor to the Middle East's digital economy, delivering a future-proof connectivity platform built for speed, density, and reliability.

OPTOKON Hosts Turkish Students through Erasmus+

OPTOKON recently had the pleasure of hosting students from the Turkish Anatolian Technical High School through the **Erasmus+ program**. Over the course of their practical training, the students learned about our company's activities, explored our range of solutions, and gained valuable hands-on experience working with fiber optic technologies.

Throughout their stay, they participated in real workshop tasks, observed production processes, and expanded their technical skills under the guidance of OPTOKON specialists. We are proud to contribute to international education initiatives and support the development of future professionals in the field of fiber optics.

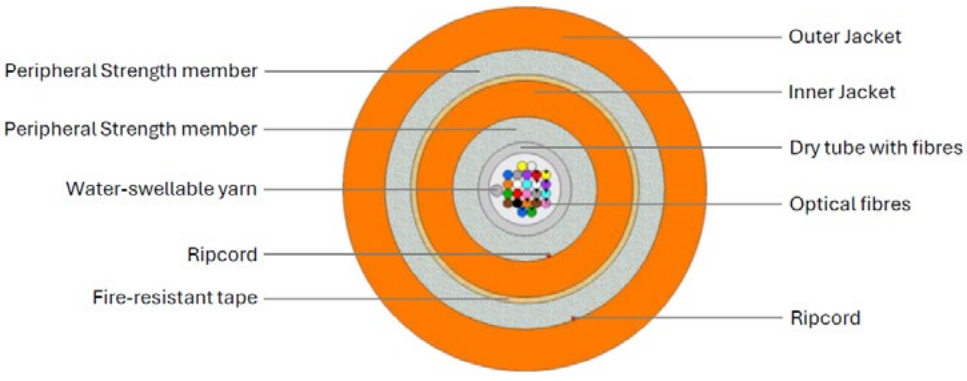
Moving Forward with New Cable Innovations

OPTOKON Kable continues to move forward in its **development and production capabilities**, successfully bringing a **new non-flammable cable into the manufacturing phase**. Designed for demanding environments and **certified to CPR class a European fire-safety category** ensuring limited flame propagation, reduced smoke emission and no burning droplets – the OPK-U-DSTF-24(24x0.25)FFHGHMGH represents an **important addition to our evolving product portfolio**.

We are also making progress in developing figure-8 aerial cable designs with a steel messenger, with the first 12-fiber prototypes now undergoing type testing.

In parallel, preparations in OPTOKON Kable we are underway for a new production line focused on tight-buffer cable constructions. T**his investment will expand our capacity for distribution cables**, innovative DROP designs and various tactical cable types. Construction of the new line is planned to begin at the end of Q1 2026, with completion expected by June 30, 2026, and full-scale production starting on July 1, 2026.

More information about the new products enabled by this line will be shared in upcoming newsletter editions.



TO STAY IN THE LOOP

Unlock exclusive access to everything OPTOKON has to offer by subscribing to our News & Offers! By scanning the QR code, you'll be the first to receive:

- **Insider Updates on our latest products before anyone else.**
- **Exclusive Offers tailored just for our subscribers.**
- **Exciting Announcements**
- **Our Quarterly Newsletter**

OPTOKON NA: Strategic expansion in optics, defense and high-speed networks

OPTOKON Group continues to extend its global footprint. Our subsidiary OPTOKON North America in Florida, led by **Mr. Paul J. Karch**, has taken several important steps in recent months that strengthen our technology base, deepen ties with academia and reinforce our presence in the **U.S. federal sector**.

A key milestone is the collaboration with **UCF CREOL**, The College of Optics and Photonics, recognized as one of the leading public institutions for optics and photonics in the United States and worldwide. This partnership focuses on **research, development and validation of advanced optical solutions**. It creates a strong bridge between OPTOKON's practical industry experience and cutting-edge academic expertise in areas such as laser technology, advanced imaging, novel optical materials and quantum photonics.

At the same time, OPTOKON North America has broadened the availability of selected OPTOKON solutions through established **U.S. federal contract vehicles, including the U.S. Army ITES 4H and NASA's SEWP V**. Through cooperation with an authorized network of partners, our portfolio is now positioned so that **U.S. defense and government customers can access proven fiber and tactical communication technologies in a more streamlined and efficient way**, wherever robust and secure connectivity is required.

Beyond the federal sphere, OPTOKON North America is also stepping up its activities in the **Fiber to the X segment**, including the rapidly expanding Fiber to the Home market in the United States. Our solutions are prepared to support large-scale deployments of optical infrastructure and to respond to growing demand for high-speed, stable and scalable networks. The focus is on reliable components and architectures that help our partners deliver modern connectivity to hundreds of thousands of end users.

Through these coordinated initiatives, OPTOKON North America reinforces both the technological strength of the OPTOKON Group and our ability to support customers at the intersection of high-end optics, defense applications and modern high-speed networks.

OPTOKON North America supports "New Beginnings – Dancing with the Stars" charity event

OPTOKON North America proudly attended the "New Beginnings – Dancing with the Stars" charity event, **contributing to raising over $100,000 in support of New Beginnings**. Founded in 2007, this Florida-based nonprofit helps individuals and families move from crisis to stability by focusing on long-term solutions and providing tools for independence, dignity and renewed purpose. OPTOKON North America is honored to support its local community and remains committed to responsible business and meaningful community engagement.

XARDA Ruggedized Display Assistant Now Available in Multiple Sizes

The **XARDA Ruggedized Display Assistant** is designed for demanding Land Force vehicle applications, delivering reliable performance in harsh military environments. It combines a high-visibility display with intuitive controls, including backlit buttons and rotary encoders, and supports DVI, DisplayPort, and HDMI inputs for seamless integration with a wide range of military systems.

To accommodate different vehicle layouts and mission requirements, **XARDA is available in multiple display sizes, including 10-inch, 12-inch, and 15-inch variants, as well as more compact options for space-constrained installations.** This range allows integrators to select the optimal screen size without compromising on durability, usability, or interface consistency across platforms.

In the same size formats, OPTOKON also offers the LMSP Rugged Panel PC, a fully integrated all-in-one solution that combines display and computing power in a single unit. By offering both display-only and all-in-one configurations across multiple sizes, OPTOKON provides a scalable and flexible human-machine interface solution for modern military vehicles and mission-critical applications.

CABLE DRUMS

OPTOKON‘s Cable Drums for Tactical Deployments

OPTOKON cable drums deliver rugged, mission-ready connectivity using our own tactical fiber optic cables with HMA connectors, designed for reliable performance in demanding military environments.

The RBD Series is optimized for field deployment, featuring **shoulder strap belts for backpack-style carrying** and cable lengths from 200 to 500 meters, ideal for mobile and temporary links. For heavier applications, the BBD Series offers a heavy-duty drum with a direct crank rewind permanently attached to the axle, **designed for installation on military vehicles or use with the TBD Series trolley**.

Built for durability, mobility, and ease of use, OPTOKON cable drums support dependable communications in any operational scenario.

Discover OPTOKON‘s HMA Connectors

OPTOKON’s HMA connectors are built for reliable optical performance in the harshest environments. Designed for military, industrial, and broadcasting applications, they feature **expanded beam technology** for resistance to water, mud, oil, and dust. The hermaphroditic design allows fast, **tool-free deployment without the need for adapters**.

Whether used in tactical networks, petrochemical installations, or temporary communication lines, HMA connectors deliver low-loss, **high-performance singlemode or multimode links**. Durable, field-repairable, and easy to deploy, they’re the ideal choice for demanding conditions.

LMRS Ruggedized Radiation Detection Sensors

OPTOKON’s radiation detection sensors are engineered for precise and reliable monitoring of gamma radiation across a wide dynamic range. W**ith a fast response time of less than one second** and sensitivity of 200 cps/µSv/h, they provide accurate readings and isotope identification from 100 keV to 3.5 MeV. Built with **IP67 protection**, the devices are designed to withstand dust, water, and harsh operating environments while maintaining consistent performance.

To meet diverse operational needs, OPTOKON now offers multiple variations of these detectors specifically adapted for integration into **aircraft, vehicles, and drones**. The sensors can be seamlessly integrated into existing military vehicle topologies using our LMCP platform or installed on drones, with communication options via radio waves or over optical fiber using our Tactical Fiber Drum. This flexibility ensures real-time monitoring in field operations where mobility, reliability, and precision are critical.

The LMRS sensors are also suitable for a wide range of other CBRN applications, utilizing our **LMRG data processing unit**, including monitoring in nuclear power plants and other industrial or scientific environments that require continuous radiation surveillance. With CAN interface connectivity, the sensors integrate easily into existing monitoring and safety systems, providing a versatile, mission-ready solution for industrial, security, and defense applications.

LMSW-E33-242-B Ruggedized Gigabit Ethernet Layer 2/3 Managed PoE Switch

The OPTOKON® LMSW-E33 ruggedized switch based on Cisco® Embedded Service Switch (ESS) extends switching capabilities to mobile and embedded networks that operate in extreme environments. The flexible, compact form factor of the switch, powered by Cisco IOS® Software, provides highly secure data, voice, and video communications to stationary and mobile network nodes, making it ideal for use in harsh environmental conditions. 1G fiber optic ports are terminated with HMA “Expanded Beam” connectors, which allows interconnection of the nodes of tactical network by the help of cables with optical fibers. The used “Expanded Beam” technology preservers all advantages of signals transmission through the optical lines in field harsh environmental conditions. The switch supports a variety of management functions, including Web UI, MIB, SmartPort, SNMP, syslog, DHCP server, SPAN session.

The switch is able to fit all the common 24 V DC power systems. The switch operates in wide operating temperature range -32 to +70°C. The switch can operate as standalone device or in addition the 19” brackets allow switch installation into 19” rack. Two switches can be connected on the side and mounted in a 19 „rack.

OFT-920 Ruggedized Optical Test Set

The OFT-920 ruggedized optical test set is designed for testing of optical networks terminated with connectors operating in harsh environment. It combines both light source and optical power meter in one common box. The test set is designed to meet the mining, petrochemical and broadcast industry demand. The ruggedized aluminium case makes the unit ideal for field operation.

The memory capacity allows storage and uploading of up to 2000 measurements including memory position or fiber number, wavelength, absolute value or relative value and insertion loss. The tester supports memory download and test report generating. The rechargeable battery ensures long term working with minimal operation costs.

- Ruggedized aluminium case
- Multimode (MM) and/or single mode (SM) applications
- Simultaneous testing of all 2/4 fibers
- Displayed units: dBm, dB
- High dynamic range
- Various light sources combinations
- Built-in charger, battery status indicator
- Easy to use with menu navigation

TACTICAL FIBER DRUM: Control Over Fiber

A fiber optic drum for drone use enables secure, high-bandwidth connection between the drone and the commander control station, allowing real-time transmission of video and data with minimal latency and immunity to electromagnetic interference.

- Provides real-time data and video transmission between drone and ground control
- Immune to EMI, jamming, and interception– perfect for contested environments
- Tactical-grade optical fiber for UAV, drones and UGV
- Field-proven solution, tested under real-world conditions
- Lightweight, rugged drum design optimized for airborne and mobile platforms
- Enables high-speed communication with low latency and high reliability
- Optional integration with automatic retraction mechanism
- For 270 µm fiber

OMK-SR-OTS.2 Diagnostic Set

Diagnostic set includes measuring instruments and tools for diagnosing faults on fiber optic cables with HMA connectors. The OPTOKON Diagnostic Set includes two instruments - Light source and Power meter. Both instruments are housed in a hard carry case that meets the requirement of fiber optic networks installation and maintenance teams, who require rugged and lightweight fiber optic test equipment that combines high performance with ease of use and reliable operation.

The Diagnostic Set allows traceable measurements on dual wavelength and data storage to the PC. It includes the hybrid master HMA-FC patchcord for testing of military tactical networks and is comprised of these measurement instruments: LS-800N light source & PM-800N power meter.

Material

Case:	Copolymer Polypropylene Structural Resin
Latches:	ABS
O‘ Ring:	Neoprene sponge
Pins:	Stainless Steel
Purge Valve:	ABS with Gore-Tex membrane
Foam:	Polyester

OSC-700
Single Fiber Fusion Splicer

The OPTOKON OSC-700 is an automatic fusion splicer for SM, MM, DS, NZ-DS (G655), EDF and other fibers. The OSC-700 is capable of ensuring high-quality splicing even in the most unfavorable environment conditions. The OSC-700 splicers are suitable for core or cladding alignment. Using one of these methods the two cleaved fibers are automatically aligned by the fusion splicer in the X, Y plane, then are fused together. The bare fiber area is protected either by recoating or with a splice protector. A splice protector is a heat shrinkable tube with a strength member and less loss.

Features:

- Core-Alignment PAS Technology
- World fast splicing and heating time: 7 second splicing and 13 second heating
- Newly-designed carry case: easy carry and can be as work plate
- Powerful removable battery up to 250 times of continuous splice and heat
- Top Quality electrode 5000 times life span electrode
- Compact & Light weight
- Fully Automatic Operation
- 5000 m altitude ensures Splice Quality
- SYSTEM TEST ensures the best working condition
- Color LCD monitor
- Pause function, convenient for scientific research
- Store 8000 groups of splice results
- USB & DC interface
- 350 Magnifications of X and Y

Standard package:


Fiber Cleaver OCL-610[2]

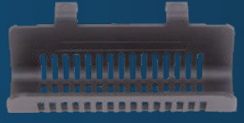
OSC-700 Fusion Splicer

Fiber Cleaver OCL-100[1]


Charger Adapter


Spare Electrodes


Carry Box


Cooling Tray


Fiber Stripper


Drop Cable Stripper

New Optical Connectors for Extreme Conditions (BE-SMF and HPF) and a New GRIN Lens

OPTOKON, a.s., in cooperation with ČVUT (Czech Technical University in Prague), has successfully completed a development project focused on optical interconnect solutions for demanding operating conditions. The result is a system based on Expanded Beam (EB) technology, designed for reliable operation in environments with increased levels of dust, humidity, and vibration, as well as in applications involving frequent handling. In such conditions, standard ferrule-based solutions are often significantly more sensitive to contamination and mechanical stress. The Expanded Beam principle works by expanding the optical beam, which reduces sensitivity to contaminants, increases operational stability, and at the same time simplifies maintenance and cleaning.

As part of the project, new connector types BE-SMF (Beam Expander for single-mode optical fibers) and HPF (High Power Connector) were developed. The BE-SMF connector was designed with an emphasis on mechanical robustness, stable mating, and long-term reliable use in both field and industrial environments. The HPF variant extends the applicability of the EB system to high-power applications, where connection stability and overall robustness are critical under increased operational demands. The development also included a new gradient-index lens (GRIN lens), which further expands optical design possibilities for industrial and specialized applications, especially where compact size and precisely defined beam shaping are required.

An important part of the project was prototyping and validation. Several prototypes were produced, including the result identified as Identification Number: TK05020032-V2, Output Name: Prototype PRO2 – Beam Expander for multimode optical fibers. Individual components and final prototypes were designed with resistance to rough handling, mechanical damage, and ease of maintenance in mind. Validation activities also included testing the influence of gamma radiation on the properties of both components and prototypes.

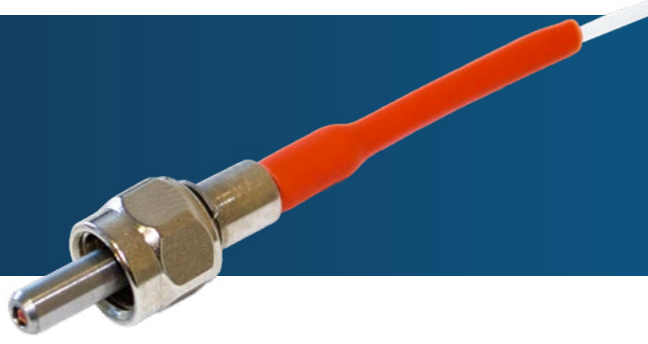
OPTOKON, a.s. acted as the main project contractor and application guarantor, responsible for industrial design, mechanical construction, prototyping, and readiness for serial production. Following the completion of development, the new connector solutions will be offered to existing and new customers through OPTOKON's global distribution network. ČVUT contributed to the expert development and validation activities, and the acquired know-how will also be used in education and in supervising student diploma projects. The practical benefits of the project include an expanded product portfolio, strengthened competitiveness, and the ability to address new customer segments in industrial and specialized applications.

BE-SMF Beam Expander

The BE-SMF Beam Expander is an optical interconnect solution designed for single-mode fiber systems operating at high optical power levels.

HPF High Power Connector

The HPF High Power Connector is designed for optical systems that operate beyond standard telecommunications power levels.



OPTOKON Accredited Calibration Laboratory Services

OPTOKON's Accredited Calibration Laboratory is a fully certified, independent facility offering calibration, testing, repair, and rental services for fiber optic test equipment from all manufacturers. Our expert team is third-party certified, and all procedures follow standard measurement practices with traceability to national etalons (ČMI). Through interlaboratory comparisons, we ensure reliable and consistent accuracy across every calibration.

Calibration Services

We provide accredited calibration for a wide range of instruments, including optical power meters, optical attenuators, light sources, RL meters, OTDRs, spectral responsivity of photodiode detectors, thermometers, hygrometers, optical spectrum analyzers, spectral parameters of optical sources, and radiation detection sensors. Calibration ensures traceability to national standards, guarantees accurate measurements within specification limits, and prepares devices for periodic testing, tenders, and industrial use

Additional Services

Our laboratory also offers equipment rental, including fiber optic test instruments and fusion splicers, as well as repair services for both OPTOKON and third-party instruments. Measurement services cover standard, customer-oriented, and specialized testing, while our training and outsourcing programs provide seminars, consultancy on test methods, and guidance on selecting appropriate fiber optic test equipment.

Global Presence and Accreditation

OPTOKON operates calibration services at two locations worldwide: Jihlava, Czech Republic, and Penang, Malaysia. Our laboratory is fully accredited by the Český institut pro akreditaci, o.p.s., in accordance with ČSN EN ISO/IEC 17025 standards, ensuring worldwide recognition and compliance with international quality and measurement requirements.

With our comprehensive services, OPTOKON supports industry, trade, and research by delivering precise, traceable, and reliable measurements for fiber optic technologies.

OPTOKON Testing Division Services

The OPTOKON Testing Division provides advanced testing services for optical cables and electronic equipment under electromagnetic, climatic, and mechanical conditions. Operating under ČSN EN ISO/IEC 17025, our division features modern facilities, including an EMC chamber and climatic test systems, to ensure precise evaluation of performance, durability, and compliance.

Our capabilities include EMC/EMI testing for military and commercial electronics (MIL-STD 461G, CISPR standards), as well as mechanical and environmental simulations such as vibration, shock, temperature, humidity, and optical cable testing according to IEC 60794 standards. Accredited tests cover tensile, abrasion, impact, bending, torsion, kink, and climatic evaluations, providing comprehensive verification of product quality and long-term reliability.

The Testing Division supports R&D, strategic product development, and certification readiness, helping ensure that OPTOKON products meet the highest operational standards. Testing is available at our Jihlava and Pelhřimov facilities, delivering reliable results for customers worldwide.