OPTOKON®

NEWSLETTER

JULY 2024

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OPTOKON, a.s.

OPTOKON Newsletter July 2024

Welcome to the latest edition of our newsletter! This issue highlights our upcoming plans and recent developments. We are excited to share that we successfully hosted our Technical SummIT event, where we delved into our strategic initiatives and engaged with industry experts. This event was a cornerstone of our efforts to connect with our partners and showcase our latest innovations.

We are also thrilled to announce our new distributor partnership, which will significantly enhance our reach and service capabilities. In the near future, we will be attending multiple exhibitions to further strengthen our industry presence.

Looking ahead, we are pleased to share our OPTOKON Vision, outlining our strategic plans for future expansion and growth.

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

OPTOKON Featured in Market Research Report 2024

We are pleased to announce that OPTOKON has been featured in the recently published Global Active Wavelength Division Multiplexer Market Research Report 2024. This comprehensive report provides an in-depth analysis of the Active Wavelength Division Multiplexer market, covering various aspects such as sales, cost, growth rate, etc.

Our inclusion in this report underscores our significant presence and influence in the market. The report highlights key data and insights across multiple segments, including market competition, regional status, outlook and application-specific performance.

As always, we appreciate your continued support and look forward to sharing more updates on our progress and achievements.

In this issue

Dear Business Partners,

we are pleased to inform you that OPTOKON shall participate in the ECOC 2024 exhibition in Frankfurt, Germany from 23 - 25th of September 2024.

Please accept our invitation to visit us at OPTOKON stand C2 in hall 5.1.

OPTOKON at ECOC 2024 in Frankfurt!

We are thrilled to announce that OPTOKON will be participating in the ECOC 2024 conference in Frankfurt, Germany! As one of the leading events in the field of fiber optics and communications technology, ECOC provides a fantastic platform for us to showcase our latest innovations and solutions.

Explore our newest products and technologies designed to meet the demands of modern connectivity. Engage with our team of experts to learn about the benefits and applications of our solutions. Additionally, this event offers valuable networking opportunities to connect with industry leaders and professionals from around the world.

We look forward to seeing you at ECOC 2024 and discussing how OPTOKON can support your connectivity needs. Don't miss out on this opportunity to stay ahead in the ever-evolving world of fiber optics!

Notable Exhibitions Attended This Year

WDS, Riyadh, Saud Arabia

FIDAE, Santiago, Chile

OPTOKON Vision: Future Expansion Plans

We are excited to unveil our OPTOKON Vision, a comprehensive showcase of our future expansion plans through impressive 3D renders. This visionary project highlights our commitment to growth and innovation, illustrating how we plan to expand our facilities to enhance capacity, storage, security, and the development of new products.

The 3D render provides a detailed visualization of our proposed building expansions, focusing on increasing our production capacity, improving storage solutions, and bolstering security measures. These new structures will support our operational growth, ensuring the highest standards of safety and efficiency. Additionally, OPTOKON Vision outlines our strategy for developing new products that will drive future advancements in the fiber optics industry.

The OPTOKON Vision reflects our strategic focus on growth and our dedication to maintaining a leading position in the fiber optics industry. We are committed to creating a world-class environment that supports our team, drives innovation, and delivers exceptional value to our customers.

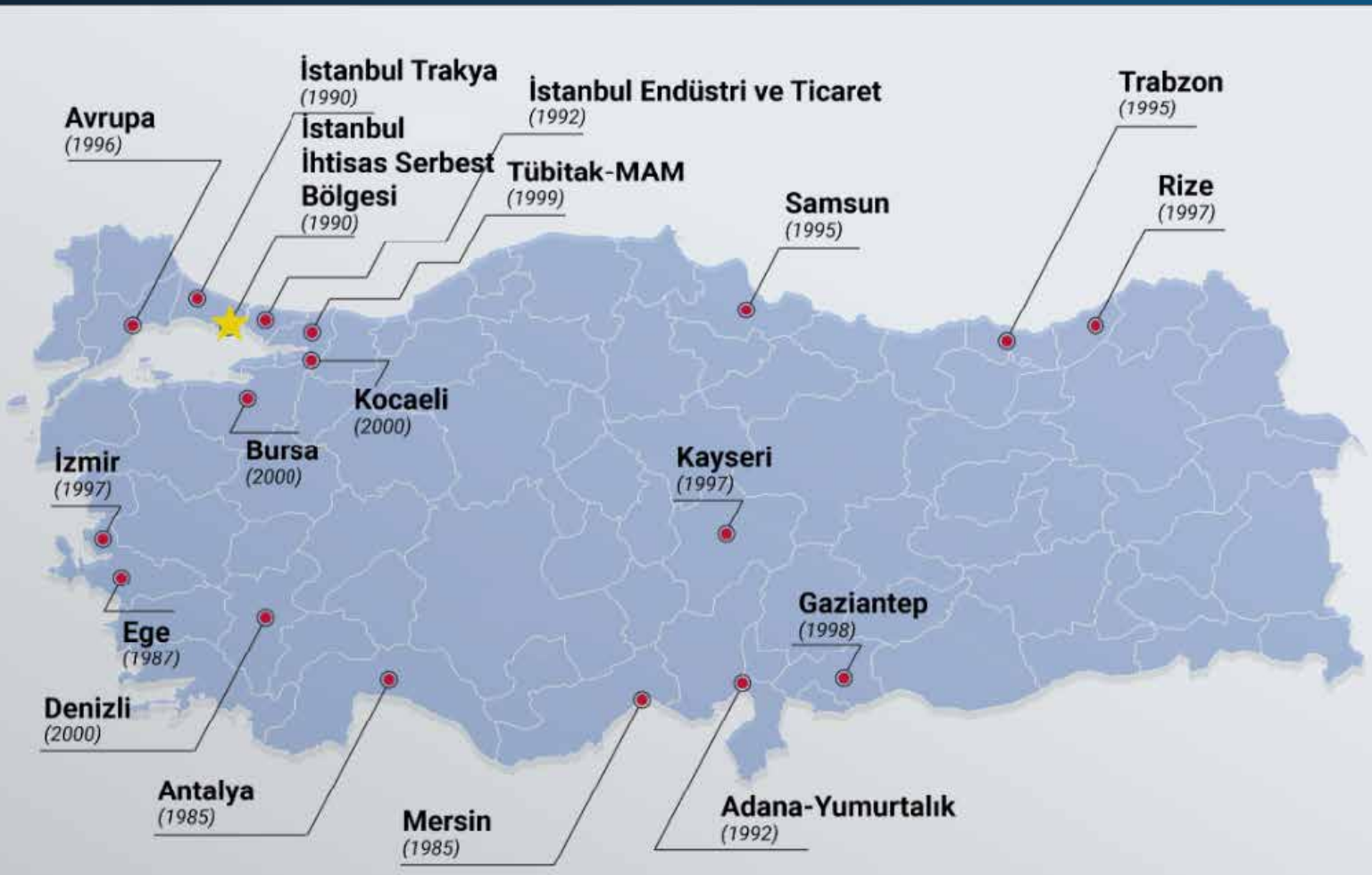
Sustainable Innovation in Free Zones

OPTOKON Elektronik is dedicated to advancing the field through sustainable manufacturing practices. Our new facility, located in a Free Zone (FZ), exemplifies this commitment by leveraging the benefits of relaxed regulations to foster export-driven investments.

This state-of-the-art facility will implement advanced waste management systems and incorporate cutting-edge technology to enhance production efficiency. At OPTOKON Group we prioritize the well-being of our employees by providing safe, ergonomic work environments and continuous training opportunities. Additionally, we are committed to engaging with the local community by creating jobs, offering internships and apprenticeships, and supporting local sustainability projects.

Free Zones, situated within a country's borders but outside its customs area, offer numerous advantages, including relaxed legal and administrative regulations. This environment is conducive to export-driven investments, boosting our production capabilities and enabling us to compete more effectively in the global market.

Through these efforts, we aim to drive the future of the industry, setting new standards for efficiency, environmental responsibility, and social impact.



OPTOKON Hosts Technical SummIT Event

We are thrilled to share the highlights from our recent Technical SummIT event, which marked a significant milestone—OPTOKON's 33rd anniversary. Held with great enthusiasm and participation, the event was a remarkable gathering of industry professionals, partners, and technical experts.

The Technical SummIT featured numerous technical presentations and engaging exhibition stands, showcasing our latest innovations and solutions. Attendees had the opportunity to explore our cutting-edge technology and interact with our experts, fostering a dynamic exchange of ideas and insights.
As part of the event, attendees were treated to a guided tour of the historic town of Telč, led by the Mayor of Telč himself. This tour provided a delightful glimpse into the rich history and culture of the town. We extend our sincere thanks to the Mayor for making this experience possible and adding a special touch to our celebration.

A significant highlight of the event was the solidification of our relations with SENKO and LEMO, further strengthening our industry partnerships. These alliances are a testament to our commitment to delivering robust and high-performance solutions. Additionally, we solemnly signed a Distributorship Agreement with the company MultiMedia Axess from Germany and Canada, marking a new chapter in our journey and paving the way for expanded collaborations and growth.

The celebration concluded with a splendid Gala dinner, bringing together industry professionals and partners for an evening of networking and celebration. The dinner provided a perfect setting to reflect on our achievements and discuss future opportunities, all while enjoying a delightful culinary experience.

We would like to extend our heartfelt thanks to everyone who attended and contributed to making this event a resounding success. Your participation and support are invaluable to us, and we look forward to many more years of innovation, collaboration, and success.

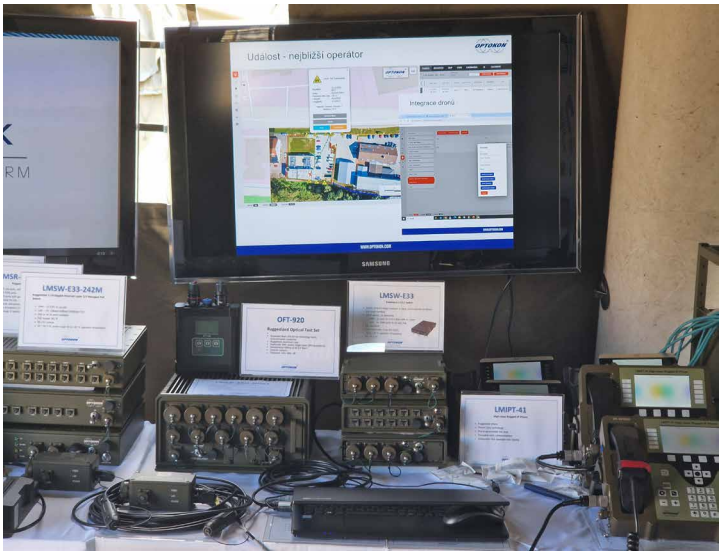
Thank you for being a part of the OPTOKON family.

OPTOKON at the 8th Signal Corps Conference

We are excited to share that OPTOKON recently attended the 8th Signal Corps Conference in Lipník nad Bečvou on June 5th and 6th, 2024. This conference provided an excellent opportunity to connect with industry leaders and showcase our cutting-edge technology.

Among the many innovative products we presented were our LMCP-7H Compact, Ultra-Durable Server, LMCP-28H-NGe1 Light Mobile Computing Platform, and LMIPT-41 High-Class Rugged IP Phones. These innovations highlight our commitment to delivering robust, high-performance solutions for demanding environments. We are proud to contribute to the advancement of secure and reliable communications technology.

Thank you to everyone who visited our booth and engaged with us. We look forward to continuing these valuable discussions and collaborations as we work together to drive the future of secure communications.


Událost - nejbližší operátor
LMSW-E33-242M
OFT-920
LMSW-E33
LMIPT-41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TATRA DEFENCE

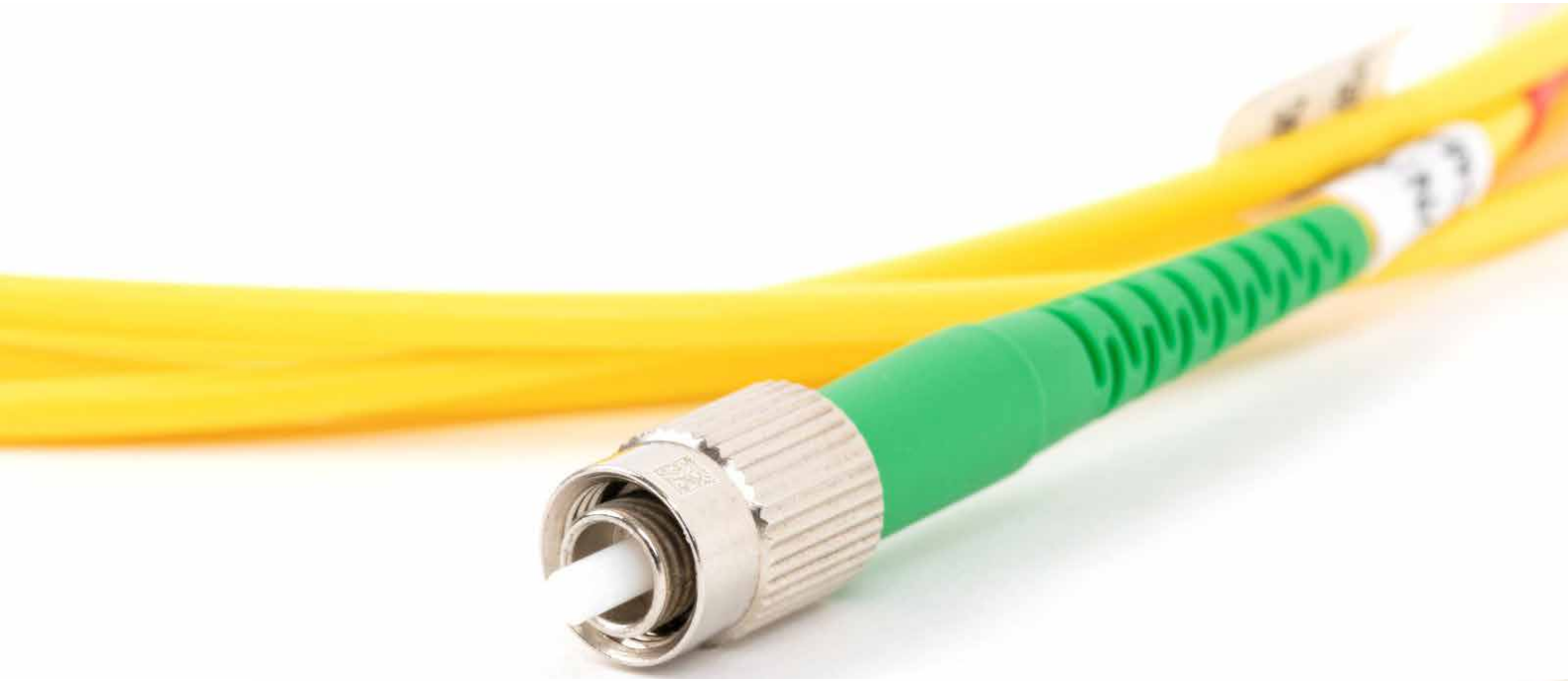
OPTOKON Implements QR Codes in Manufacturing

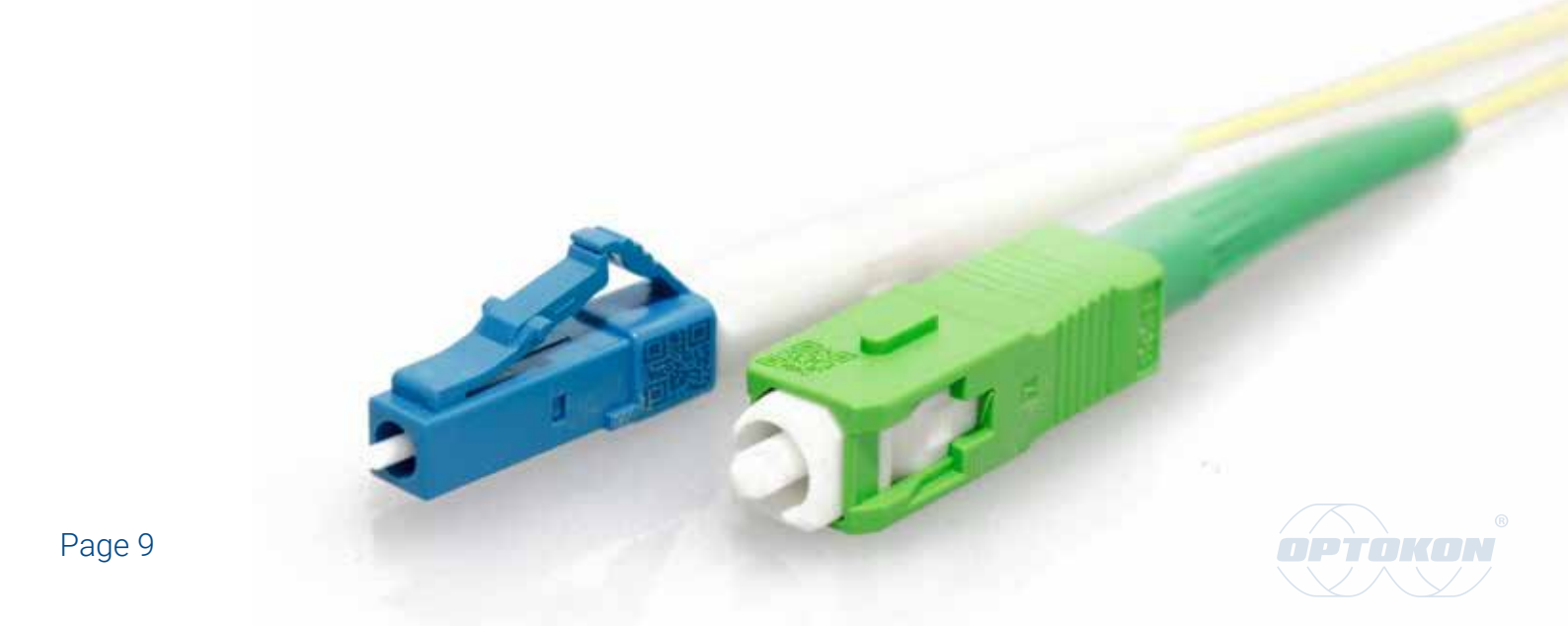
OPTOKON is on the brink of finalizing the implementation of QR codes into its manufacturing processes. This initiative is set to revolutionize how we manage product tracking and data accuracy in production. By integrating QR codes, we aim to enhance our efficiency, ensure precise quality control, and streamline our manufacturing workflow.

The new system involves generating unique QR codes for each product. These codes are used to automatically set all necessary measurement parameters for different products, ensuring that each item is handled with the exact specifications required. This approach not only saves time but also reduces the likelihood of human error, ensuring consistent quality across our product range.

When a product is scanned during the manufacturing process, the system reads the QR code and retrieves all relevant data from the database. This includes setting parameters for tests and measurements, recording results, and updating the database with the latest information. This seamless integration facilitates real-time data management and enhances traceability.

The move to QR code implementation aligns with OPTOKON‘s commitment to leveraging cutting-edge technology to improve manufacturing processes. As we prepare to finalize this implementation in the coming weeks, we are excited about the increased capacity, storage, and security that this system will bring to our operations.



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CONNECTOR
INSERTION
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λ 1310 nm
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OFT-4212R
PM
VFL
Power

FOTAS and Pathfinder: Innovations in Perimeter Security

In the realm of perimeter security, technological advancements are reshaping the landscape, offering sophisticated solutions to mitigate risks and bolster protection. Two cutting-edge systems, FOTAS (Fiber Optic Distributed Acoustic Sensing) and Pathfinder, stand out as pioneers in this domain, each offering unique features and capabilities tailored to address diverse security challenges.

FOTAS: Revolutionizing Acoustic Detection

FOTAS harnesses the power of optoelectronics to detect acoustic events in the vicinity of buried or fence-mounted fiber optic cables. Leveraging artificial intelligence (AI), FOTAS classifies these events with remarkable accuracy, distinguishing between human activity, vehicle movement, and potential threats like manual digging or excavation. Its web-based user interface provides operators with comprehensive data, including geographic location, time intervals, and movement intensity.

One of FOTAS's standout features is its versatility, finding applications across various sectors such as perimeter security, pipeline monitoring, and seismic activity detection. Operating efficiently without external power for distances of up to 50 km, FOTAS does not energy at the detection site delivering real-time insights crucial for threat assessment and response coordination.

Pathfinder: A Paradigm Shift in Perimeter Surveillance

Pathfinder, developed by Applied Research Associates (ARA), adopts an asymmetric approach to perimeter security, deviating from traditional linear sensor deployment. By strategically positioning sensors in areas of known vulnerabilities, Pathfinder optimizes coverage while minimizing resource utilization. Its compact size and covert installation ensure stealthy operation, while advanced machine learning algorithms enhance detection accuracy and reduce false alarms.

Key to Pathfinder's effectiveness is its extended wireless transmission range, enabling seamless monitoring of extended perimeters and critical routes. With sensors capable of transmitting data over distances of up to 12 miles without additional infrastructure, Pathfinder provides early-warning detection in remote areas where traditional surveillance methods fall short.

SCAN QR
TO VISIT OUR
WEBSITE

Specialized SENKO Training at OPTOKON

From May 27th to 29th, 2024, we had the privilege of hosting a specialized SENKO training session dedicated to the assembly and testing of the innovative SN-MT connector. This intensive program provided our team with hands-on experience and advanced insights into this cutting-edge technology, ensuring we remain at the forefront of optical connectivity solutions.

The SN-MT connector is integral to our DOS Cabling System solution, a high-density, modular system that enables the quick and cost-effective mass installation of pre-terminated cable assemblies. As next-generation data center upgrades turn up to 1600-Gbps, SN Cable Assemblies are a likely choice, supporting up to 1600-Gbps QSFP-DD and OSFP transceivers with a reduced ferrule pitch and higher density than LC connectors.

A big thank you to SENKO for their expertise and partnership. Our team is now more equipped than ever to deliver top-notch solutions to our clients.

DATA CENTER
DOS
CABLE SYSTEM

DOS® Data Center Cable

Due to the ever-increasing volume of data in global networks, Data Centers are becoming increasingly important, and their construction continues at a steady, faster pace. This places everincreasing demands on the optical infrastructure. Optical cabling must be used to reliably interconnect data center devices, such as servers, switch data stores. It must also ensure the interconnection of individual data center nodes, connection to the global data network and connection of customers and users of data center services. All this while ensuring maximum economy during installation and operation of the data center. These requirements are met by the modular concept of the **OPTOKON DOS** cabling system. The system is based on factory prepared modules, preterminated cables, which significantly reduce the volume of installation work during construction and facilitate the fault clearence during operation. The DOS - SN-MT16 cabling system is based on multi-fiber connector technology. The newly developed multi-fiber connectors SN-MT16 are designed to terminate 16 fiber cables. The use of trunk cables with these connectors eliminates the need for splicing in optical cabinets, speeds up installation and ensures system modularity. Basically, the design of a cable with 96 fibers was chosen, 16 fibers are stored in 6 tubes.

OptoNet Communication
DATOVÉ CENTRUM VYSOČINA

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Tailored networking and telecom support for thriving businesses.

Cutting-edge data center solutions with top-tier security.

Reliability and innovation at your service.

- Incorporates Energy-efficient Cooling Systems for Sustainable Operations
- Equipped with Robust Security Measures and Redundancy Protocols
- Strategically Located for Seamless Connectivity and Accessibility
- Compliant with Tier III+ Standards for Unmatched Reliability
- Cutting-edge Data Center Infrastructure

OPTOKON®

LMSP

the Lightweight Portable and Intelligent Rugged MIL--STD-461E Computer, also known as the LMSP. This cutting-edge system is designed with a robust display, tailored specifically for diverse military environments such as naval ships and infantry applications. With seamless integration onto various platforms, the LMSP boasts specifications that cater to the unique needs of each branch of the armed forces.

Versatility is key with the LMSP, as it can be easily mounted, enabling portable operations in any scenario. Equipped with a daylong battery, the tablet meets the demands of multiple mission profiles in different Military vehicle platforms or NAVY applications. Its ability to run on Windows and Linux platforms offers flexibility, ensuring compatibility with a range of military software controls and providing a long service life.

Designed for use in embedded machine vision battery-powered appliances, the LMSP tablet computer delivers all-day battery life, making it an indispensable tool for military operations.

LMDS Light Mobile Data Switch

The LMDS is a lightweight mobile data switch in a portable frame powered by a built-in UPS. Both devices meet the required IP rating. It can be powered from AC 230 V or DC 24 V mains. For batteries it is possible to monitor their status - transparent window on the cover.

The switch based on the proven Cisco ESS 3300 technology in a ruggedized design meets all requirements for the establishment and operation of mobile data networks.

A 10 Ah battery type BB-2590U serves as a backup power supply. This assembly ensures compatibility on the contemporary battlefield and the unification of charging sources used, for example, in L3Harris FALCON II radios, III and FALCON IV.

- **Ruggedized design for setting up mobile networks**
- **Proven Cisco ESS 3300 technology**
- **2x WAN 1/10G**
- **8x LAN 10/100/1000Base-T(X) with PoE**
- **MRJ-resistant connectors**
- **Reliable, widely used batteries - 2 pcs**
- **Battery status indication**
- **Easy battery replacement during operation**
- **External Power Supply:**
  - **230 V AC from AC generator**
  - **24 V DC from the vehicle's on-board power supply**

RUGGEDIZED 1/10 GIGABIT ETHERNET LAYER 2/3 MANAGED POE SWITCH
2X 1/10G WAN, FO HMA
24X LAN 10/100/1000BASE-T, POE

OPTOKON´s R&D
SOLUTION TECHNOLOGY INTEGRATOR OF
CISCO SYSTEMS

The OPTOKON® LMSW-E33 ruggedized switch based on Cisco® IE industry technology 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. 10G 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 -40 to +70°C. The switch can operate as standalone device or in addition the 19” brackets allow switch installation into 19” rack.

LIS-V Industrial server

The LIS-V is powerful server set with Intel® Xeon® Processor CPU and high performance NVIDIA® card designed as management and processor unit for industrial application. The LIS-V computing and processing power is designed especially for modern AI applications, integrates maximum compute and networking throughput and enables deep learning and artificial intelligence capability through the use of neural networks. LIS-V management and processor unit has a dedicated Intelligent Platform Management Interface (IPMI) port to allow remote management of the server. The LIS-V server system is available in various configuration, see Table Version.

Each Version includes two units:

a) LIS-X – 1U main server unit
b) LIS-EB – 1U supplementary unit

Rear panel view

Discover OPTOKON‘s HMA Connectors

At OPTOKON, we take pride in developing advanced solutions that meet the stringent demands of harsh environments. Our HMA Connector series exemplifies this commitment, offering robust performance and reliability across various industries.

The OPTOKON HMA connectors are designed for connecting nodes in tactical and harsh environmental networks using optical fiber cables. These connectors excel in applications such as heavy industry, petrochemical installations, military communications, and temporary broadcasting lines. The innovative expanded beam technology ensures signal transmission is preserved even in challenging conditions, providing immunity to water, mud, dust, oil, and other contaminants.

Featuring hermaphroditic coupling, the HMA connectors eliminate the need for adapters and allow rapid deployment, creating low-loss singlemode and multimode daisy-chained links. These connectors are built to withstand extreme conditions, making them ideal for environments where low maintenance and quick repairability are crucial.

OPTOKON’s HMA connectors are designed to provide superior performance and reliability in the most challenging environments. Whether for military, industrial, petrochemical, or broadcasting applications, our connectors ensure secure and dependable communications. For more details on our products, visit our website or connect with us on LinkedIn.

PM-215E Pocket optical power meter/USB probe

The PM 215E optical power meter is a small, pocket size low cost item. The small size does not prevent the optical meter fulfilling all technical requirements for field equipment.The tester can be used as pocket power meter or as an USB probe, part of testing workstation. It can be placed within rack mount ODF's with the display on the top or on the side. The Li-Pol rechargeable battery ensures long term working time with a minimum life time of 2 years.The unit is able to store 100 measurements which can be uploaded to PC and managed with SmartProtocol software or Data Exporter.

- **Portable power meter or USB probe**
- **New faster hardware**
- **Option for Bluetooth or WIFI module**
- **Supports SM and MM fiber testing**
- **More than 20 working wavelengths**
- **Absolute and Relative power measurement**
- **Internal memory for up to 100 measurements**
- **Comes with its own application for setting, data transfer**
- **USB-C port for control, charging, and data transfer**

NEW DESIGN!

LS-215E

The LS-215E optical light source is a small size low cost item which fulfils all necessary technical field equipment requirements. Available in working wavelengths 850/1300 for multimode or 1310/1550 nm for single mode applications or a visible 650 nm laser source. Batteries can be charged via a USB port or external AC/DC adaptor.

The versatile output port facilitates the simple integration of commonly used optical adapters (FC, SC, or ST) in telecommunications, data, and industrial networks. This output port is specifically designed for the connection of connectors with a PC polished finish.

- **Dual wavelength output**
- **Multimode and Single mode version**
- **Smallest size, light weight**
- **Changeable output adapters**
- **USB port: Battery charging**
- **Powered by Li-Pol type battery**
- **Battery status indicator**
- **10 min Auto Off**

NEW ON THE MARKET!


OPTOKON