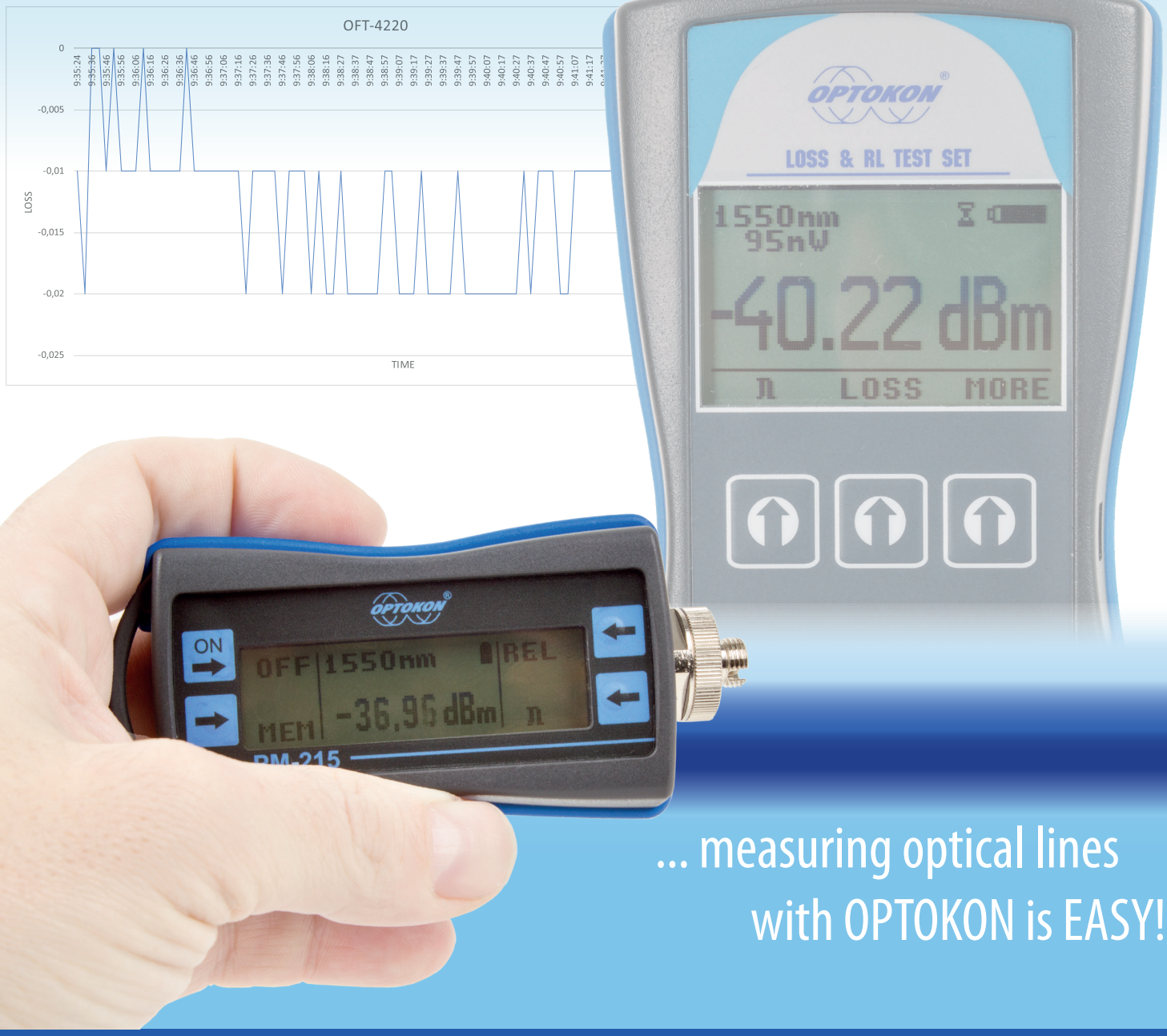
OPTOKON®

FIBER OPTIC TEST EQUIPMENT

High quality handheld test and measurement instruments



... measuring optical lines
with OPTOKON is EASY!

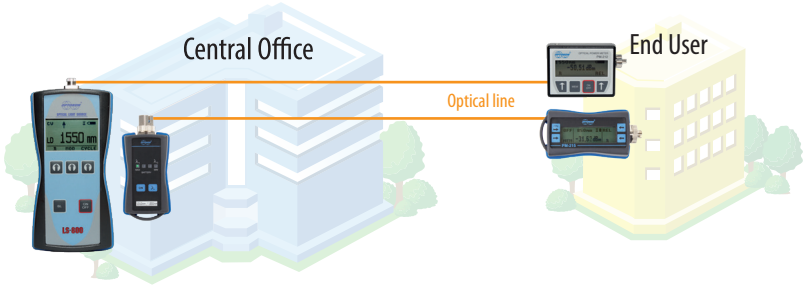
Calibrated by accredited calibration laboratory No. 2315

WWW.OPTOKON.COM

2020 Edition

POCKET LIGHT SOURCE / POWER METER

OPTOKON, a.s. a leading global designer and manufacturer of fiber optic network solutions specializes in the production of fiber optic test equipment and is the manufacturer of the smallest power meter currently available on the market. The OPTOKON range of high-quality handheld test and measurement instruments enables fiber optic technicians and engineers to reduce work times and improve performance by using compact, portable top-quality tools. Lightweight, easy to learn and use, these top selling instruments include power meters, light sources and loss test sets in both standard and ruggedized versions



- Standard - 6 working wavelengths
- CWDM type - 21 working wavelengths
- Bluetooth control, backlight option
- MPO/MTP multifiber version available
- Internal two-level memory structure
- PC Software – creates test reports
- USB port for charging / data upload
- Changeable input adapters

PM-215-G(L)

Pocket optical power meter USB probe

The PM-215-G(L) 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 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.

Two functions:
Portable power meter
USB probe – testing workplace accessory

PM-212 Pocket power meter

PM-212-CWDM Pocket power meter

Two functions:
Portable power meter
USB probe – accessory of Testing Workplace

The PM-212 is a pocket size optical power meter. The small size does not prevent the optical meter fulfilling all technical requirements for field equipment. The unit can store up to 100 measurements which can be uploaded to a computer and managed with SmartProtocol software.

Standard version for single fiber

MPO/MTP multifiber version

- Smallest on the market
- Switchable display function (right/left-hander use)
- SM and MM fiber testing, 6/21 wavelengths (CWDM)
- Absolute and relative optical power measurement
- High power level measurement up to +36 dBm
- Bluetooth control, backlight option
- Internal two-level memory
- PC Software – Test report creation

LS-215 Light source

The LS-215 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.

- Universal 2.5 mm output port
- Single or dual wavelengths source
- Powered by Li-Pol type battery
- Battery status indicator

All OPTOKON test equipment is incredibly easy to operate – as the OPTOKON slogan says, "it's simply child's play". Each item of test equipment has a maximum of five buttons to operate.

STANDARD / INSTALLATION

PM-800-G(L) Power meter

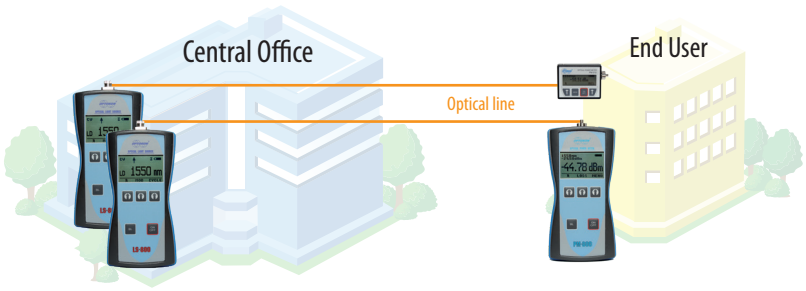
The PM-800-G and PM-800-GL are members of the OPTOKON test equipment family designed for thorough fiber optic line diagnostics. Both are designed to measure absolute or relative optical power in optical networks. It can be used as portable power meter or as a USB probe. The changeable adaptor design allows the simple exchange of optical connectors according actual need.

Automatic wavelength detection

The automatic Wavelength Detection (AWD) mode means the OPTOKON Light source and Power meter can be used without manually switching the measured wavelength and decreases the possibility of faulty measurement.

Cycle mode

Cycle mode allows the device to automatically toggle between available wavelengths.



- Standalone power meter
- InGaAs or Si photo detector
- Absolute and relative optical power measurement
- High power level measurement up to +36 dBm
- CW, 270 Hz, 1 kHz, 2 kHz modulation detection
- Auto Wavelength Detection(AWD) mode
- Cycle mode
- Changeable input adaptors
- USB probe mode
- Two-levels high capacity memory

LS-800 Light source

The LS-800 optical light source is a small size low cost item, which fulfils all necessary technical field equipment requirements. It is available in seven working wavelengths of 850, 1300, 1310, 1490, 1550, 1625 nm and a visible 650 nm laser source. The modulation and AWD (Auto Wavelength Detection) functions are available when interacting with the PM-800 power meter. The rechargeable battery has a minimum lifespan of five years. Batteries can be charged via a USB port or external AC/DC adaptor. The microprocessor controlled charging process ensures optimal battery status and extended operation time.

The changeable connector/adaptor design allows the simple exchange of optical PC or APC connectors (FC, SC or ST) and easy cleaning of the output connector ferrule after removing the connector adaptor. LC/PC and LC/APC are also available.

- Small size, lightweight
- Modulation CW, 270 Hz, 1 kHz, 2 kHz
- AWD function (Auto Wavelength Detection)
- Changeable output connectors
- Up to 7 light source combinations
- High power source
- Powered by Li-Pol batteries
- Battery status indicator
- Battery charging via USB port
- 10 min Auto Off

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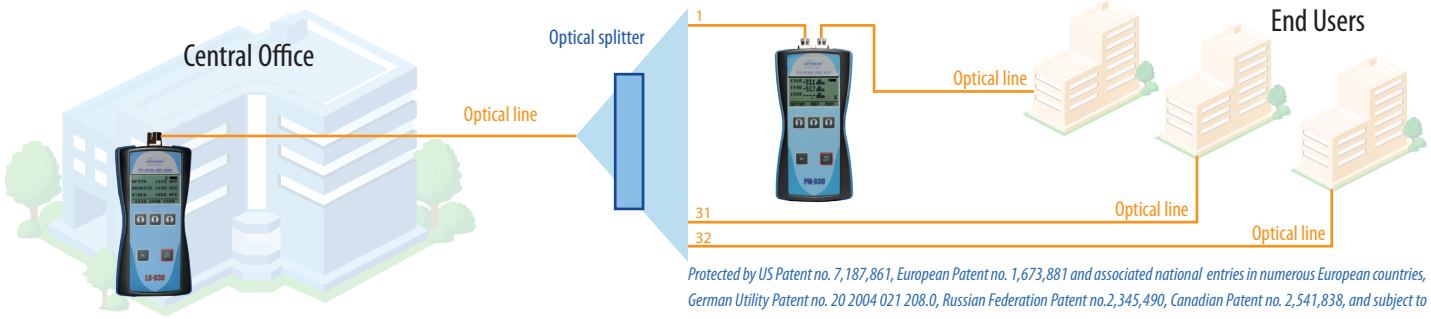
FTTH - PON UNINTERRUPTED SIGNAL TESTING



Protected by US Patent no. 7,187,861, European Patent no. 1,673,881 and associated national entries in numerous European countries, German Utility Patent no. 20 2004 021 208.0, Russian Federation Patent no.2,345,490, Canadian Patent no. 2,541,838, and subject to pending national entry in China.

PM-830D-FTTX Optical power meter

The PM-830-FTTX optical power meter is designed for simultaneous measurement and display of all signals – voice, data and video. The tester can be used as portable power meter or as a USB probe, or part of a testing workstation. The FTTX tester is ideal for testing PON services during activation and maintenance. The memory capacity allows storage and uploading of up to 2000 measurements. The stored data can be easily exported to Excel, Word or any other application.

- Small size, lightweight
- Three simultaneously measured PON wavelengths
- Pass-through testing
- Absolute and relative optical power measurement
- Large memory capacity for storing measured data
- USB probe mode - full control via simple commands
- Auto Off
- Battery status indicator
- Easy to use

LS-830-FTTX Optical light source

The LS-830-FTTX optical light source is designed for simultaneous testing of three wavelengths on optical lines, especially in FTTX projects. It combines 1310 nm, 1550 nm and 1490 nm output wavelengths at one output port. In cooperation with the PM-830-FTTX power meter it simultaneously measures and displays all three wavelengths. If required, it can measure at one or two wavelengths.
The changeable connector/adaptor design allows the simple exchange of optical PC or APC connectors (FC, SC) and easy cleaning of the output connector ferrule after removing the connector adaptor. LC/PC and LC/APC are also available.

- Small size, lightweight
- Three simultaneously transmitted wavelengths
- Powered by Li-Pol batteries
- Built-in charger
- Auto Off
- Battery status indicator
- Easy to use

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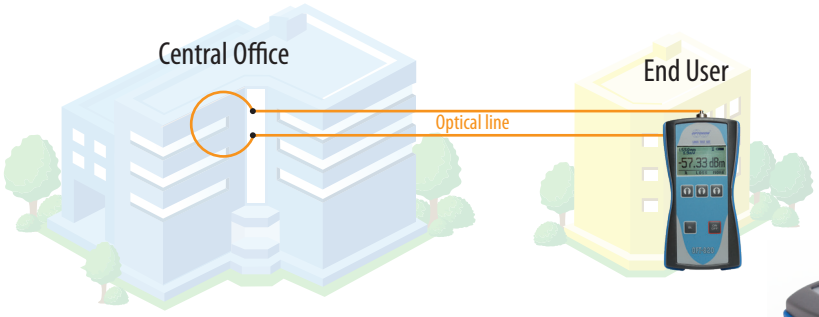
LOSS TEST SETS - TWO IN ONE ERGONOMIC CASE



OFT-820 Loss test set

The OFT-820 series optical loss test set combines two items of optical test equipment - a light source and power meter in the same case. The optical light source fulfills all the necessary technical requirements for field equipment and is available in working wavelengths of 850, 1300, 1310, 1490, 1550 and 1625 nm. The optical Power Meter is designed to measure absolute or relative optical power in optical networks.
The memory capacity allows storage and uploading of up to 3000 measurements including memory position, fiber number, wavelength, absolute value or relative value and insertion loss. The SmartProtocol PC evaluation software supports memory download, test report generation and a Data Exporter for data download to Excel sheets.

Two functions:
Portable power meter
USB probe – accessory of Testing Workplace

- Light source and power meter in one ergonomic case
- Modulation detection
- AWD (Auto Wavelength Detection) function
- Various working wavelengths
- High capacity memory, SmartProtocol PC software
- Absolute and relative optical power measurement

OFT-840 Loss test set with RL Meter

The OFT-840 series optical loss test set with optical Return Loss (RL) combines an optical light source, power meter and return loss testing in the same box. The optical Light Source fulfills all the necessary technical requirements for field equipment and is available in two working wavelengths of 1310nm and 1550nm. The optical power meter is designed to measure absolute or relative optical power in optical networks. The optical RL function provides extended measurement range with improved linearity.
The memory capacity can store and upload of up to 3000 measurements including memory position, fiber number, wavelength, absolute value or relative value and insertion loss. The SmartProtocol PC evaluation software supports memory download, test report generation and a Data Exporter for data download to Excel sheets.

Two functions:
Portable power meter
USB probe – accessory for testing workplace

- Optical Return Loss (RL) meter 0 - 65 dB
- Light source & power meter in one ergonomic case
- Detection of modulation 270 Hz, 1 kHz, 2 kHz
- AWD (Auto Wavelength Detection) function
- Various working wavelengths
- High capacity memory, SmartProtocol PC software

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POF TEST EQUIPMENT

OFT-820-POF Loss test set

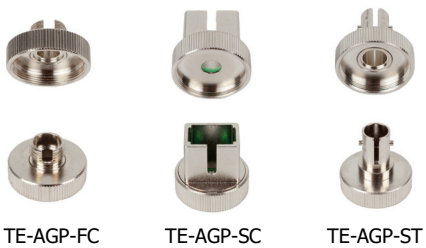
The OFT-820-POF loss test set series is designed for POF – Plastic Optical Fiber network testing. It combines two optical test equipment items - a light source and power meter in the same case. The tester can be used as portable power meter or as USB probe, or as part of a testing workstation. The optical light source fulfills all the necessary technical requirements for field POF network measurements. The source sends optical light into the output interface, available in a working wavelength of 650 nm. The optical power meter is designed to measure absolute or relative optical power in POF networks.

Two functions:
Portable power meter
USB probe – accessory for testing workplace

- POF testing
- Easy exchangeable adapters – source and power meter:
- FC, SC, ST, HFBR connectors
- Universal 2.5 mm ferrule connectors
- Universal 2.2 mm POF cable
- High capacity memory
- SmartProtocol PC software - memory download, reporting solution
- Data Exporter PC software – data download to Excel sheet
- Contrast display with backlight

CHANGEABLE ADAPTORS FOR OPTOKON TEST EQUIPMENT

- Can be used for OPTOKON PM-800-G(L) and PM-215-G(L) testers



TE-AGP-FC
FC adaptor

TE-AGP-SC
SC adaptor

TE-AGP-ST
ST adaptor

Compatible with adapter type G

TE-AGLP-FC
FC adaptor

TE-AGLP-SC
SC adaptor

TE-AGLP-ST
ST adaptor

TE-AGLP-LC
LC adaptor

Compatible with adapter type GL

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TEST SET TOOLKIT

OPTOKON universal SM/MM/POF/MTP toolkit

The OPTOKON universal toolkit includes a light source and power meter and all neccessary tools. All instruments are housed in a waterproof hard carry case that meets the requirements of fiber optic networks installation and maintenance teams.

Case

- Interior dimensions: 37.1 x 25.8 x 15.2 cm
- Watertight, crushproof, and dustproof
- Easy-open, double-step latches
- Automatic pressure equalization valve
- Comfortable, rubber over-moulded handle

OPTOKON Diagnostic set

The OPTOKON diagnostic set includes a light source and power meter. Both instruments are housed in a hard carry case that meets the requirements of fiber optic networks installation and maintenance teams.

- LS-800 Optical light source
- PM-800-G(L) Optical power meter

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COMPACT TEST EQUIPMENT

PM-4212 – Compact 4-port optical power meter

The PM-4212 is a 4-port portable optical power meter. The small size does not prevent the optical power meter fulfilling the operational requirements of a full size tester.
The power meter is designed for simultaneous measurement of up to four single mode or multimode fibers. All four input interfaces are fitted with 1mm InGaAs photo detectors, with changeable adapters for a wide range of single mode and multimode fiber connectors.
The tester can be used as standalone power meter or as part of a testing workstation. Communication with control software is through the USB port or an Ethernet network.

- Stand-alone power meter
- USB probe – accessory for testing workstation
- Ethernet probe – accessory for testing workstation
- Small size, lightweight
- 4 channel power meter
- Aluminum case
- SM & MM fiber testing
- Easy changeable connectors for wide-ranging applications
- Absolute and relative optical power measurement
- Ethernet RJ-45 port and USB port: for full control via simple commands

Ethernet port
The PM-4212 power meter series is assembled with a 10/100 Mbps Ethernet port for connection to the local area network. In combination with the software the operator can remotely control and measure the network or periodically monitor the link status.

MULTIFIBER OPTICAL POWER METER

PM-212-MPO Multifiber optical power meter

The PM-215-MPO 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 USB probe, part of testing workstation. The unit can be easily carried in the pocket or on the belt.

Two functions:
Portable power meter
USB probe – accessory for testing workplace

- MPO/MTP connector 12/24 or 16/32 fibers
- Absolute and relative optical power measurement
- Display backlight
- Two-levels high capacity memory
- PC software

MPO-12/24
Input adapter

MPO-16/32
Input adapter

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MULTIFIBER OPTICAL POWER METER AND LIGHT SOURCE

PM-240-MTP Multifiber optical power meter

The PM-240-MTP optical power meter is designed to measure absolute or relative optical power in optical networks terminated with 12 – 24 multifiber MTP/MPO connectors. The tester can measure simultanously optical power level in up to 24 fibers of MTP/MPO connectors, and can recognize "live" and "dark" fibers. This eliminates the need for a fan-out from multi to single fiber connectors. The memory capacity allows storage and uploading of up to 3000 measurements including memory position or fiber number, wavelength, absolute value or relative value and insertion loss. The SmartProtocol PC evaluation software supports memory download, test report generation and the Data Exporter for data download to Excel sheet.

Two functions:
Portable power meter
USB probe – accessory for testing workplace

- Easy measurement of multifiber connectors
- MTP/MPO input interface
- Absolute and relative optical power measurement
- Displayed units: dBm, dB, mW
- InGaAs or Si photodetector
- Detection of modulation 1 kHz
- MTP polarity check
- Display backlight
- Two levels high-capacity memory
- PC software

LS-240-MTP Multifiber optical light source

The LS-240-MTP multifiber optical Light Source is designed for use with the PM-240-MTP power meter for testing patchcords and cables terminated with multifiber MTP/MPO connectors. The portable testing device fulfils all necessary technical field equipment requirements. Available in two versions, 12 and 24 fibers.
The LS-240-MTP can send light step by step into all 12/24 fibers of MTP/MPO connectors, the switching process can be made manually or automatically. Together with the PM-240-MTP power meter it can measure Insertion loss in all 12/24 fibers at same time, in addition it is able to to check the status of fibers interconnection between both MTP connectors. The light source output is ensured via the MTP/MPO type multifiber connector. It is possible to define the number of channels 12/24, polishing style angled/flat and male/female (with alignment pins or without pins).

- Small size, light weight
- Multifiber MTP/MPO connectors testing
- Single or dual wavelength testing
- Large display with backlight function
- Powered by Li-Pol battery
- Battery status indicator
- Battery charging via USB port, µP controlled
- 10 min Auto Off

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INSPECTOR

FOI-400W InspectFiber-WiFi

The fiber end face inspector is designed for ferrule end face inspection with excellent performance and convenient operability. It magnifies the object by 260 to 400 times making it easier to assess the status of the fiber end face. The compact size makes it the ideal tool for connector end face inspection before and during fiber network installation. Various adapter types can be used for inspecting male fiber connectors & female fiber connectors, such as FC, SC, ST, LC.
The OPTOKON FOI-400W microscope might be connected via USB and Wi-Fi to PC and Smartphone/Tablet, both Android and Apple operating system. The SW allows the storage of the inspected connectors for later evaluation and reporting protocols and Pass/Fail Analysis according to IEC 61300-3-35 standard.

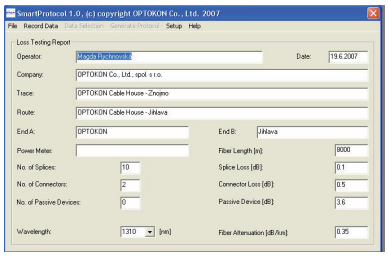
- WiFi and USB connection to Smartphone and PC
- Android App and iOS (Apple) App both
- Pass/Fail Analysis to IEC 61300-3-35
- Available several connector & adaptor types Tips (Both Female / Male Tip)
- External Interface: mini 5-pin type
- Save inspected images and reports
- Real-time report in field through smartphone
- Built-in rechargeable battery
- No need exterior Wireless AP or Module

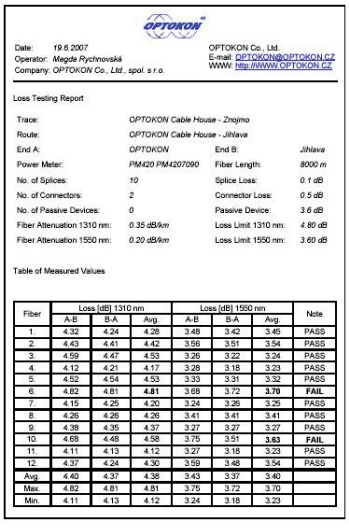
SOFTWARE

SmartProtocol PC software

SmartProtocol software is a flexible solution for data capture, analysis and reporting fiber optic loss and is optimized for OPTOKON optical testers: PM-800, PM-212, PM-830 and OFT-820.

- Creation of protocols from recorded data
- Pass / Fail assessment
- Easy language and report customization
- Simple operating and editing of protocols





Loss Testing Report

Trace:	OPTOKON Cable House - Znojmo		
Route:	OPTOKON Cable House - Jihlava		
End A:	OPTOKON	End B:	Jihlava
Power Meter:	PM420 PM4207090	Fiber Length:	8000 m
No. of Splices:	10	Splice Loss:	0.1 dB
No. of Connectors:	2	Connector Loss:	0.5 dB
No. of Passive Devices:	0	Passive Device:	3.6 dB
Fiber Attenuation 1310 nm:	0.35 dB/km	Loss Limit 1310 nm:	4.80 dB
Fiber Attenuation 1550 nm:	0.20 dB/km	Loss Limit 1550 nm:	3.60 dB

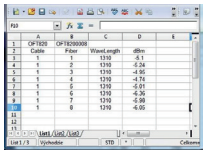
Table of Measured Values

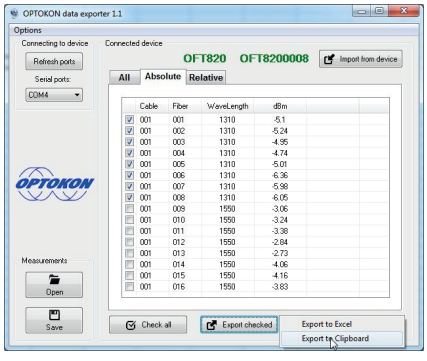
Fiber	Loss [dB] 1310 nm			Loss [dB] 1550 nm			Note
	A-B	B-A	Avg.	A-B	B-A	Avg.	
1.	4.32	4.24	4.28	3.48	3.42	3.45	PASS
2.	4.43	4.41	4.42	3.56	3.51	3.54	PASS
3.	4.59	4.47	4.53	3.26	3.22	3.24	PASS
4.	4.12	4.21	4.17	3.28	3.18	3.23	PASS
5.	4.52	4.54	4.53	3.33	3.31	3.32	PASS
6.	4.82	4.81	**4.81**	3.68	3.72	**3.70**	FAIL
7.	4.15	4.25	4.20	3.24	3.26	3.25	PASS
8.	4.26	4.26	4.26	3.41	3.41	3.41	PASS
9.	4.36	4.35	4.37	3.27	3.27	3.27	PASS
10.	4.68	4.48	4.58	3.75	3.51	**3.63**	FAIL
11.	4.11	4.13	4.12	3.27	3.18	3.23	PASS
12.	4.37	4.24	4.30	3.59	3.48	3.54	PASS
Avg.	4.40	4.37	4.38	3.43	3.37	3.40	
Max.	4.82	4.81	4.81	3.75	3.72	3.70	
Min.	4.11	4.13	4.12	3.24	3.18	3.23	

Data Exporter PC software

The Data Exporter is a software utility for easily importing measurement from OPTOKON measuring devices to a PC. It enables to create an Excel file or export data to the clipboard for subsequent processing. It is optimized for OPTOKON optical testers: PM-800, PM-212, PM-830 and OFT-820.

- Data exporting from internal memory
- Creates MS Excel files





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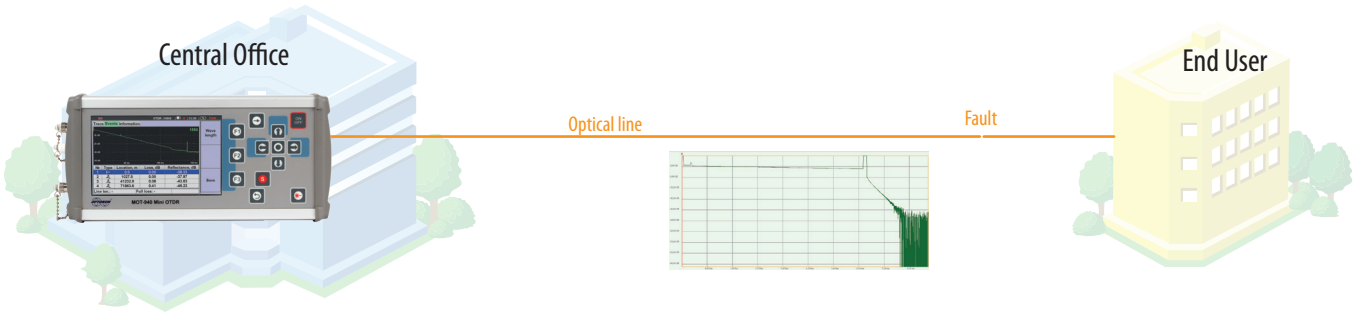
MINI OTDR



MOT-940 Mini OTDR series

The MOT-940 mini optical reflectometer series comes in a compact metal housing and functions as a full OTDR with an optical light source. The reflectometer determines the distance to reflecting and non-reflecting events and measures insertion loss and attenuation loss on optical lines. In addition, the MOT-940 is fitted with an optical power meter and a visible light source. The power supply is ensured by the inbuilt rechargeable Li-Ion battery, which provides long work times.

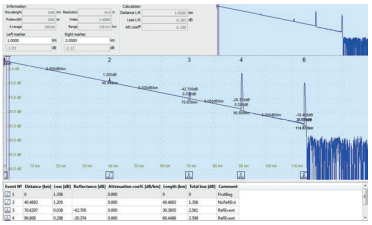
MOT-940 - standard version

The MOT-940 is designed for testing single mode and multimode optical fiber parameters in the process of installation, operation and maintenance, respectively the fault location:

- Backbone and local networks
- FTTx networks, PON
- Access networks

- Portable, lightweight reflectometer
- Multimode and single mode measurement
- Large LCD color screen
- Optical trace analysis, High dynamic range
- PMH module – measures optical power
- VFL module – visible light 650 nm
- PC control option, TOP OTDRView - Evalution SW
- Internal memory for 1000 traces, Bellcore format
- Upgrading of internal software via USB

MOT-945 Industrial OTDR series



- Desktop or rack mount design
- Designed for laboratory and manufacturing use
- Simultaneous SM and MM measurement
- MM (850, 1300 nm) & SM (1310, 1490, 1550, 1625 nm)
- VFL 650 nm included

OLC-P/M (Mini OTDR Launch Cable)

Launch fibers are a necessary component when using an OTDR to find faults in an optical fiber cable.
The launch cable allows the OTDR trace to settle down after the test pulse is sent into the fiber to analyze the beginning of the cable to be tested.

- Portable small lightweight design
- Cable length defined by the customer
- Various types of optical connectors

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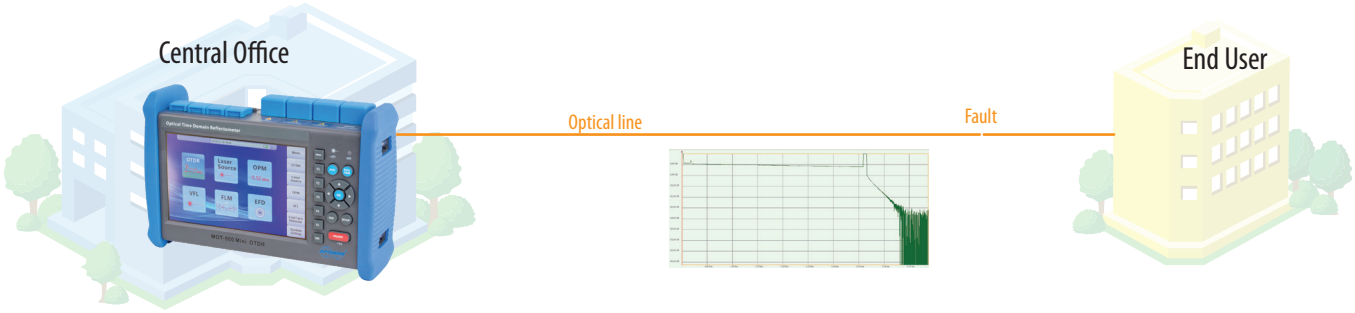
MINI OTDR



MOT-500 Mini OTDR series

MOT-500 series Optical Time Domain Reflectometer (OTDR) is an intelligent meter of a new generation for the detection of fiber communications systems. With the popularization of optical network installed in cities and countryside's, the measurement of optical network becomes short and disperses; MOT-500 is specially designed for that kind of application. It's economic, having outstanding performance. MOT-500 is manufactured with patience and carefulness, following the national standards to combine the rich experience and modern technology, subject to stringent mechanical, electronic and optical testing and quality assurance; in the other way, the new design makes MOT-500 more smart and compact and multi-purpose.

Main functions Multimode OTDR - In addition to standard single mode 1310/1550 nm, MOT-500 series OTDR supports multimode 850/1300 nm test mode for option to analyze multimode fiber network.

VFL (visual fault locator) - The VFL, available as a standard module in MOT-500 series OTDR, offers built-in 650 nm visual fault location on a FC/UPC connector.

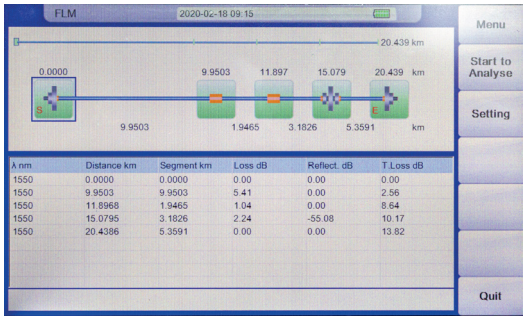
PON ONLINE TEST- MOT-500 series OTDR uses 1625nm wavelength to scan and analyze the access point and proceed online testing with optical filter, and will not disturb the service.

PM (power meter) - MOT-500 series OTDR comes with optional built-in power meter that let technicians easily verify the presence of a signal.

LS (laser source) - MOT-500 series OTDR comes with optional built-in laser source through OTDR1 Port that let technicians easily verify the total loss of the local network with a power meter.

FM (fiber microscope) - The optional fiber inspection probe facilitates the inspection before the connection. MOT-500 series OTDR offers this capability through a USB port connection, which allows quick and easy inspection of connector end faces for contamination and also enables it capture and store the image.

FLM Test (Fiber Link Measurement), also known as "Optical Eye", uses multiple pulse width acquisitions and advanced algorithms to quickly characterize the fiber under test and display the optical events applying intuitive symbols.



- Integrated design, smart and rugged
- IP65 protection level, outdoor enhanced
- 7-inch anti-reflection LCD screen
- PON online test module (1625 nm) is optional
- MMF test module (850/1300 nm) is optional
- Support multi-language display and input

Ready for all kinds of environment.

MOT-500 series OTDR is specially designed for tough outdoor jobs. IP65 protection level, lightweight, easy operation, low-reflection LCD and more than 12 hours working period make it perfect in field testing. Meanwhile, optional PCB board with water-proof coating helps MOT-500 series OTDR get better protection performance.

All OPTOKON test equipment is incredibly easy to operate – as the OPTOKON slogan says, "it's simply child's play". Each item of test equipment has a maximum of five buttons to operate.

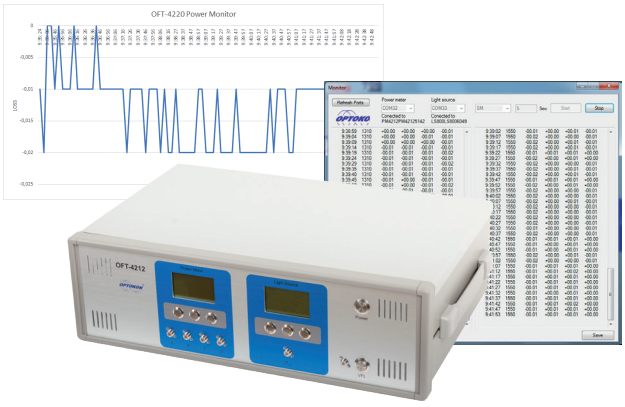
LABORATORY TEST EQUIPMENT

OFT-4212 loss test

The OFT-4212 series optical Loss Test Set combines two optical test equipment – Light Source and Power Meter in the same box, equipped with 4 OUT/IN ports. The optical Light Source fulfills all the necessary technical requirements for testing in Multimode and Single mode applications at 4 working wavelengths. The optical Power Meter is designed to measure absolute or relative optical power in four optical fibers simultaneously.

- Light source and power meter in one box
- Aluminum case
- 4 channel loss test set
- SM & MM fiber testing
- Easy changeable connectors for wide ranging applications
- Absolute and Relative optical power measurement
- Ethernet RJ-45 port and USB port
- Control via simple commands

SW for evaluation attenuation time dependency



OFT-2930R loss test set with RL meter

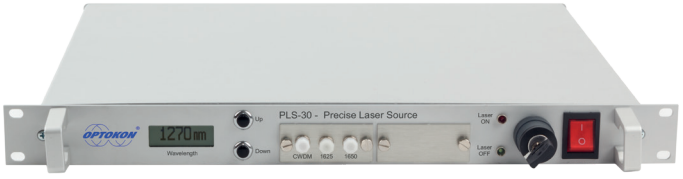
The OFT-2930R series optical Loss Test Set with optical Return Loss (RL) combines an light source, power meter and return loss testing. The optical light source fulfils all the technical requirements for testing in multimode and single mode applications at four working wavelengths: 850, 1300, 1310, and 1550 nm. The OFT-2930R is a compact, stand-alone insertion loss and return loss test meter. The OFT-2930R allows the user to view the IL and RL for up to four wavelengths simultaneously. The color display coupled with user configurable pass/fail settings make it extremely easy to qualify fiber optic patchcords for telecom standards. Additionally, the unit features an Optical Reflectance Scan Mode, On Screen Context Help, and the ability to measure return loss on both ends of a DUT through the front panel.
The OFT-2930R uses the USB interface to communicate and be driven by OPTOKON software which further integrates the unit into a highly efficient production line.

- Insertion and return loss measurement
- Seven wavelengths measurement:
  850, 980, 1300, 1310, 1490, 1550, 1625 nm
- 4-fibers simultaneous MM and SM measurements
- Multimode and single mode application
- Optical Return Loss (RL) meter 0 - 70 dB
- LAN and USB connection – full remote control

PLS-30 Precise optical light source

The PLS-30 light source includes precise optical light sources designed for laboratory use. The customized design allows implementation of up to nine optical sources in a 1U frame. The PLS-30 light source provides an automatic power control loop to keep output power constant. The light source output ports are available on the front panel in separate FC/APC connector adapters or in one common port, with a switchable wavelength using an internal optical switch.

- Precise optical light source
- Up to nine custom defined wavelengths in 1U box
- Automatic output power control



Parameter	Multimode	Single mode
Wavelengths (nm)	635, 650, 850, 880, 910, 940	CWDM wavelenght (on one port switchable),1625,1650

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RUGGEDIZED TEST EQUIPMENT & SECURITY SYSTEM

NATO supplier code: 1583G

OFT-920 Ruggedized optical test set

The OFT-920 ruggedized optical test set is designed for testing optical networks terminated with connectors operating in harsh environments both a light source and an optical power meter in one case. The test set is designed to meet tactical military, and broadcast industry demand. The ruggedized aluminium case makes the unit ideal for field operation. The tester supports memory download and test report generation. The rechargeable battery ensures long lifespan with minimal operation costs.

- Expanded Beam and ferrule technology harsh environmental connectors
- Ruggedized aluminium case
- Multimode (MM) and/or single mode (SM) applications
- Simultaneous testing of all 2/4 fibers
- High dynamic range
- Up to four light source combinations
- Internal memory
- Built-in charger, battery status indicator

OFT-850 SMPTE Hybrid Cable Test Set

The OFT-850 set consists of SMPTE SOURCE and SMPTE TESTER unit. The hybrid cable tester is designed for testing of loss in optical fibers and checking of continuity of copper pairs in hybrid cables. It combines optical light source on one side, optical power meter on other side and copper wires checker. It is ideal for testing large spaces of LEMO SMPTE Hybrid System for Broadcast Infrastrucutre Networks.

- Hybrid cables – fiber optic testing and copper pairs checking
- MM or SM applications
- Simultaneous testing of 2 fibers
- Manual or auto operation
- Internal memory

OFT-855 & OFT-855D SMPTE Hybrid Cable Checker Set

The OFT-855 set consists of SMPTE Tester and SMPTE Remote unit – Loopback. The hybrid cable checker is designed for for testing of optical power level in optical fibers and continuity of copper pairs in hybrid cables. It combines optical light source, optical detector and copper wires checker. The Tester is equipped with Display. The Remote unit is just a passive Loopback. It is ideal for testing large spaces of SMPTE Hybrid System for Broadcast Infrastructure Networks. The ruggedized aluminium case makes the unit ideal for field operation. The Lithium rechargeable battery ensures long term working with minimal operation costs.

- Hybrid cables – fiber optic and Cu pairs checking
- Ruggedized aluminium case
- Equipped with Display
- Automatic operation check all fibers and wires
- Able to detect incorrect fiber and wire, disconnection and short circuit connection
- Built-in charger, battery status indicator
- Easy to use

All OPTOKON test equipment is calibrated by the OPTOKON Calibration Laboratory before shipping and all test equipment comes with a standard warranty and calibration certificate.

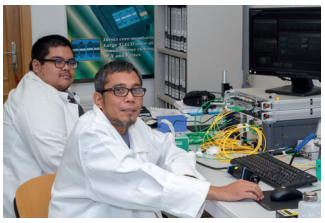
OPTOKON TESTING DIVISION

OPTOKON Accredited Calibration laboratory No. 2315

The OPTOKON calibration laboratory offers excellent prices and fast turn-around times for all types of fiber optic test equipment. Established in 1999, the calibration laboratory is an on-site, independent laboratory offering a comprehensive range of metrological services in the field of fiber optic calibration, verification, measurement and consultation. The laboratory helps our customers to comply with the steadily increasing requirements for product and service quality and reliability. Calibration services were accredited by the Czech Accreditation Institute in accordance with ISO 17025 standard (listed as calibration laboratory No. 2315) in 2003. The laboratory also provides fast and nondestructive screening of materials and products for conformity with EU directives 2202/95/EC (RoHS) and 2002/96/EC (WEEE) and the outsourcing of metrological services.

Calibration Center for Europe and the Asia-Pacific Market

Czech Republic, Jihlava workplace



Malaysia, Kuala Lumpur workplace

Malaysia, Ipoh workplace

Accredited calibration services:

- Calibration of optical power meters **(wavelengths 635, 650, 850,880,910,940,1270,1310,1330,1490,1550,1625, 1650 nm)**
- SM detector (photodiode) spectral responsivity calibration **(All CWDM wavelength, 1625 and 1650 nm)**
- MM detector (photodiode) spectral responsivity calibration **(wavelengths 635, 650, 850, 880, 910 and 940 nm)**
- Calibration of OTDRs
- Calibration of optical attenuators
- Calibration of light sources
- Calibration of RL meters
- Calibration of temperature and humidity

Other calibration services :

- Calibration of OSA
- Calibration of spectral parameters of optical sources

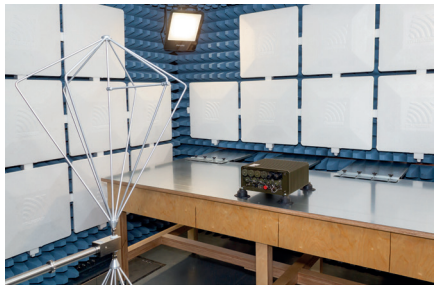
In addition, the OPTOKON calibration laboratory also provides training, consultancy and outsourcing.
Metrological traceability: Etalons and reference material according to the requirements contained in ISO/IEC 17025.

Mechanical testing, temperature and semi-anechoic chamber

The OPTOKON testing division offer accredited Individual temperature and mechanical test methods according to the standard ISO/IEC 17025.

Testing services:

- EMC (ElectroMagnetic Compatibility) test
- Tensile test fiber optic cables
- Cable abrasion test
- Pressure resistance test
- Shock resistance test
- Repeat bending test
- Torsion Test
- Test of cable fexibility
- Bending test in loop
- Dynamic bending test
- Temperature cycling
- Watter penetration test



OPTOKON EMC Chamber

The OPTOKON chamber meets all the MIL-STD 461G requirements for the certified EMC measurement of the tests: CE 101; CE 102; CS 101; CS 114; CS 115; CS 116; RE 102 and RS 103. The design of the chamber meets the field intensity minimum 50 V/m for the susceptibility tests. The shielding effectiveness measured according to the EN 50147-1 is stronger than the EN 50147-1 recommendation.

OPTOKON Temperature Chamber

OPTOKON Pressure resistance test workplace

All OPTOKON test equipment is calibrated by the OPTOKON Calibration Laboratory before shipping and all test equipment comes with a standard warranty and calibration certificate.

OPTOKON

OPTOKON, a.s. is a leading global producer and supplier of premium active and passive fiber optic components specializing in fully tested integrated data network, FTTx and tactical military solutions. Our components and solutions can be found in applications in businesses, communities and armed forces throughout the world.

- Fiber optic technology leadership
- 30 years experience on the global fiber optic market
- NATO supplier code: 1583G
- More than 25 years experience supplying the militaries of over 25 countries
- National Security Authority certified
- ISO and AQAP certified
- Accredited Calibration Laboratory No. 2315

OPTOKON PORTFOLIO, SERVICES & DIVISIONS

FIBER OPTIC DIVISION

- Connectors, Cable Assemblies
- Cable Management Systems
- Splitters, WDM, CWDM and DWDM
- Data Network Equipment
- Test Equipment
- Harsh Environment Optical Network

TESTING DIVISION

- Calibration laboratory
- Mechanical and temperature testing
- EMC semi-anechoic chamber

SERVICE DIVISION

OPTOKON GROUP HEADQUARTERS PRODUCTION & RESEARCH CENTER CZECH REPUBLIC

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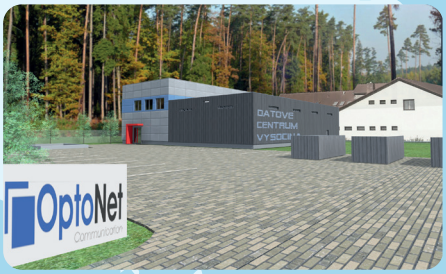
OPTOKON Prague Office
Venušina 1149/3, Prague 10

OPTOKON Baltic
OPTOKON Malaysia
OPTOKON Oman
OPTOKON Poland
OPTOKON Saudi Arabia
OPTOKON Serbia
OPTOKON Slovenia
OPTOKON Turkey
OPTOKON Ukraine

OptoNET Communication
- Data Center Vysočina
- Complete solution for ISP
- Management of optical network
- Datacenter and telehouse services

OPTOKON Kable
- Optical cables manufacturing



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EUROPEAN UNION
European Regional Development Fund
Operational Programme Enterprise
and Innovations for Competitiveness