Company Profile

- Company founded in 1985;
- Corporate headquarters located in Ottawa, Canada;
- Manufacturing facility in Ottawa/Canada, Izmir/Turkey, and Jiaxing/China
- Seven Product Groups: Laser-to-Fiber Delivery Systems, High Power Fiber Optic Components, Polarization Maintaining Products, Attenuators, Opto-Electronic Packaging, Test Equipment, Fiber Optic Sensor Systems
- Sales offices in Canada, USA, Europe, Turkey, and China
Company Profile

- Three Product Groups:
  - Fiber Optic Components 70%
  - Optical Test Equipment 25%
  - Fiber Optic Sensors 5%

- Over 1,000 products
- Leading Edge R&D
Product Innovation
Product Innovation

New Products, OCT Products, 2 Micron Products

Optical Signal to Noise Ratio Generator
Broadband Polarization Entangled Photon Source
OCT Modules
2 Micron Fused Couplers / Taps / Splitters / Combiners
Modulator Bias Controller
Broadband Variable Attenuators for OCT Applications
2 Micron Fiber Pigtailed Laser Diode Sources

OZ Optics
shop.ozoptics.com
www.ozoptics.com

Global Leader in Fiber Optic Components since 1985
Company Profile

Over 498 employees worldwide:

- 277 in Ottawa and US
- 71 in Turkey
- 150 in China
Company Profile

**OZ Optics is lead by an experienced team:**

- Ömür Sezerman, Chairman, President & CEO
  - Founder and CEO since inception (34 years)
- Zahide Sezerman, VP of Human Resources
  - With OZ Optics since inception (34 years)
- Garland Best, VP of Components Division
  - 27 years at OZ Optics
- Gordon Youle, VP of Test Equipment Division
  - 20 years at OZ Optics
- Martin Powell, Operation Manager
  - 15 years at OZ Optics
- Metin Sezerman, General Manager of OZ Turkey
  - 18 years at OZ Optics
- Bing Li, General Manager of OZ Optics China
  - 15 years at OZ Optics
Company Profile

- ISO 9001:2015 certified
- Broad patent portfolio
- Advanced proprietary processing technology
Using our strong direct sales and distributors, we address the following markets:
OZ Optics has resellers and distributors in over 30 Countries & Regions and over 10,000 customers globally:

- Australia
- Austria
- Belgium
- Brazil
- Canada
- China
- Czech Rep.
- Denmark
- France
- Germany
- Greece
- Hong Kong
- India
- Ireland
- Israel
- Italy
- Japan
- Netherlands
- Luxembourg
- Norway
- Poland
- Portugal
- Singapore
- South Korea
- Spain
- Switzerland
- Sweden
- Taiwan
- Thailand
- Turkey
- United Kingdom
- United States
In-House Production Capabilities

- Experienced and well-trained staff in following fields:
  - optical, mechanical, electronics & software

CNC Machine Shop

AR Coating

Femtosecond Laser Lab

Clean Room

Laser Conditioning/Cleaving
Branch Network

OZ OPTICS CANADA (Headquarters)

OZ OPTICS TR (Turkey Factory)

OZ OPTICS CHINA (Jiaxing Factory)
Facility – Ottawa Headquarters

- 60,000 sq ft. – Manufacturing and R&D Facilities
- 15,000 sq ft. – Admin, Sales and Marketing
- 15,000 sq ft. – Training and Fitness Facility
- R&D, Product Design, Engineering, Final Assembly & QA
OZ Optics – Turkey Factory

- Operational since 2000
- 33,000 sq ft. Manufacturing Facility
- Located in Free Trade Zone
- Low Tax Rates
- Sub Component Parts Manufacturing
- Cost Effective Manufacturing
- High Quality Labor
OZ Optics China

- Operational since 2009
- Wholly Foreign Owned Enterprise
- Subcomponent Parts Manufacturing
- Cost Effective Manufacturing
- High Quality Labor
- Extensive Training (3-6 months in OZ Canada)
OZ China Facility

Jiaxing, China

- Located in Economic Development Zone
- 500 sq meters – Admin, Sales and Marketing
- 1500 sq meters – Manufacturing Area
  - 100 sq meters – Class 10,000 Clean Room
  - 100 sq meters – ESD Working Area
All products manufactured are in strict accordance with international industry standards:

- Qualified for F35 JSF and F18 Program
- Telecordia Compliance
- CE Compliance
- RoHS Compliance
- ISO 9001:2015 Certified (Canada, China and Turkey)
- Controlled Goods Directorate Registered
Core Competencies

- Pioneer in Polarization Maintaining (PM) Components
- Leader in Wavelength Flattened, High Power & Low PDL Components
- Leader in High Power Fiber Optic Delivery Systems
- Custom Test Equipment, Including Polarization Test Equipment and FTTH Equipment
- Widest Range in Attenuator Product Offering
- Fiber Optic Distributed Strain and Temperature Sensors
- Complete product line for OCT applications & 2 Micron
- Now available: Bias Controllers, Spectrometers, Optical Noise Generators and Broadband Polarization-Entangled Photon Source
Leading Technology

- High Power Isolators
  - power handling > 50W
  - low loss, low cost
turnkey solution

- Pioneer in Polarization
  Maintaining (PM) Components
  - wavelength flattened
  - high power & low PDL
  - PM test equipment

- Leader in High Power
  Fiber Optic Delivery
  Systems
  - specializes in custom
design

- Fiber Optic Sensor
  - fast and simultaneous
  measurement of strain & temp
  - large structure health monitoring
OUR VISION
• Be the preferred Supplier of choice
• Capture and expand market share
• Maximize shareholder value

OUR MISSION
• To become the leading provider of innovative optical products to telecom and non-telecom sectors

OUR CORE VALUES
• Leadership
• Teamwork
• Boldness
• Commitment
• Innovation
• Rewards

OUR QUALITY POLICY
• Provide our Customers with a competitive advantage, leveraging performance, price and delivery, through a continuous process of Quality advancement in all areas of our Company
• Communicate effectively to our Customers, Suppliers and Shareholders our commitment to Quality, continuous improvement and to abide by any applicable requirements
• Promote opportunities of professional development for all members of our Company through education, training and personal challenge

Ömür Sezerman
President
Competitive Advantage

- Superior Technology
- Innovative Engineering
- Exceptional Quality & Service
- Competitive Pricing
- Extensive Experience in Fiber Optics Manufacturing
- Global Presence
- Success
Fused Splitters For Visible and Near IR Applications

- Operating wavelengths from 488 nm to 2000 nm
- Multimode, single mode and PM fiber versions
- Wavelength flattened versions
- Low loss (typically less than 0.3 dB)
- Wavelength dependence typically ±0.25 dB over operating range
- Low PDR, typically <0.1 dB
- Miniature and ruggedized package options
840 nm Broadband Splitters

![Graph showing split ratio and insertion loss variation of a 2x2 80/20 splitter. The graph plots split ratio (%) against wavelength (nm) and shows the variation of split ratio and excess loss (dB) across the spectrum. The graph indicates that the split ratio and excess loss vary with wavelength, with some peaks and troughs.](image-url)
1060 nm Broadband Splitters

Insertion Loss and Split Ratio versus Wavelength for Fused splitter Sample #1

- Excess Loss (dB)
- Split Ratio (%)

Wavelength [nm]
Fiber Optic Collimators and Focusers

- Variety of Collimator Sizes
- Aspheric or achromatic lenses for superior beam quality
- Infrared achromats for superior wavelength independence
- AR coated optics for maximum transmission, low return losses
- Variety of beam sizes
- Centration better than 1 mrad with respect to mechanical axis.
Optical Isolators

- Broadband wavelength operation, more than ±40 nm
- High isolation over wavelength and temperature
- Low insertion loss over wavelength and temperature
- Compact Size
840 nm Isolator Insertion Loss
840nm Isolator Isolation

Temperature and wavelength dependence of Broadband Isolator
(Typical isolation of a competitor’s conventional isolator is also shown as a reference)

Note: Data is noisy at this wavelength, due to the weak signal from the SLD at this wavelength.
Optical Circulator For 1064 nm

- Exceptionally small size
- Better than 20 dB Isolation over 100 nm range
- <3 dB Insertion Loss at 1060 nm
- Better than -50 dB crosstalk
Optical Circulator for 1064 nm Insertion Loss Behavior

Insertion Loss vs Wavelength @ Room Temperature of Wide Band Circulator for 1060nm.

- Port 1 to 2
- Port 2 to 3
Optical Circulator for 1064 nm Isolation

Isolation vs Wavelength @ Room Temperature of Wideband Circulator for 1060nm

Port 2 to 1

Wavelength (nm)

Isolation (nm)
Polarization Controllers

- No intrinsic loss
- No back reflection
- Miniature housing
- Easy to use
- Wavelength insensitive
- Low cost
Optical Delay lines

• Electrically controlled via RS232
• Over 300 ps delay range, < 1 dB typical IL
• 0.003 ps (0.8 micron) Resolution
OCT Interferometer Modules

- Combines splitters, attenuators, circulators into a single module
- Mach Zehnder and Michelson versions
- Custom built to customer specifications
- Single mode, and PM fiber versions
- 850 nm, 1060 nm, 1300 nm, and 1550 nm Versions
Broadband SLD Stable Sources

- 830 nm, 1060 nm, 1300 nm and 1550 nm versions
- 50-100 nm linewidths
- Over 10 mW output power versions
- Single mode and PM fiber versions
Voltage Controlled Tunable Filters

- All fiber based
- Standard:
  - 1520-1570 nm
  - 1460-1620 nm
- 12 V tuning range
- 2.5 kHz tuning rate
- <3 dB loss over entire range
Inline Fabry-Perot Tunable Filters

- High resolution, super-cavity finesse and low loss design
- Vibration and shock resistant and thermally stable
- Fast scanning permits fast, accurate measurements
- Customizable center wavelength, FSR, finesse, and bandwidth
- Center wavelength bands from 800 to 2000 nm
- Small footprint and low power requirements
- Telcordia GR 2883 qualified
The OZ Optics Commitment

*OZ Optics is committed to providing a complete solution and support to all your OCT requirements.*
OZ Optics Limited

Your solution provider for existing and next generation fiber optic components, test equipment, and sensor systems…

For sales information please contact us at:
613-831-0981 x 3370 or 1-800-361-5415
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