OZ Optics Limited

Laser & Laser Diode to Fiber Delivery Components
July 2018
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
OZ Optics Products

Global Leader in Fiber Optic Products since 1985

Fiber Optic Attenuators for SM, PM, and MM Fibers

- Digital Variable Attenuators
- Electrically Controlled Variable Attenuators
- MEMS Variable Attenuators
- SM / PM / MM Fiber Pigtailed Inline Variable Attenuators
- Single/Multi Channel Miniature Variable Attenuators
- Reflective Style Variable Attenuators
- Air Gap Variable Attenuators
- Plug Type Fixed Attenuators
- Attenuating Fiber Patchcords

Laser & Laser Diode to Fiber Delivery Systems

- Laser to Fiber Couplers
- Bare Fiber Adaptors with Magnetic Clips
- Bulkhead Receptacles
- Pigtail/Receptacle Style High/Low Power Collimators/Forcers
- High/Low Power Patchcords
- WDM/RGB Combiners

OZ Optics Products

www.ozoptics.com
Product Innovation

**Fiber Optic Distributed Strain and Temperature Sensors**

- BOTDA only, BOTDR only, or both BOTDA and BOTDR modules in one unit
- Simultaneous measurement of strain and temperature
- Fast, dynamic measurement of strain and/or temperature up to 100 km sensing range
- Uses standard telecommunication fiber to minimize costs

**Fiber Optic Fault Finder for Optical Network Safeguard™**

- Monitors and reports network health status in real time, 24 hours/day, 365 days/year
- Reduces revenue loss due to fiber plant outages
- Reports fault location, giving GPS coordinates with time stamp
- Lowers network operation and maintenance expenses
- User-friendly interface via various wireless interfaces (WiFi, GPRS, UMTS, or RS-232)
- Early alert and outage reports via cellular phone, email, IM, SMS, or text messaging

OZ Optics

Global Leader in Fiber Optic Products since 1985

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Product Innovation

Oz Optics

Global Leader in Fiber Optic Products since 1965

2 micron Fiber Optic Components for PM and SM Fibers

- Fiber Optic Patchcords
- Fused Couplers / Taps / Beam Splitters / Combiners
- Fiber Pigtailed Laser Diode Sources
- Pigtailed / Receptacle Style Collimators / Focusers
- Polarizers
- Isolators
- Manual / Electrically Controlled Variable Attenuators

OCT Modules
- Manual / Electrically Controlled Fiber Optic Delay Lines
- Polarization Controllers
- Broadband SLED Sources

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Company Profile

Over 420 employees worldwide

- 240 in Ottawa and US
- 70 in Turkey
- 110 in China
Company Profile

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

- Ömür Sezerman, Chairman, President & CEO
  - Founder and CEO since inception (33 years)
- Zahide Sezerman, VP of Human Resources
  - With OZ Optics since inception (33 years)
- Garland Best, VP of Components Division
  - 26 years at OZ Optics
- Gordon Youle, VP of Test Equipment Division
  - 19 years at OZ Optics
- Martin Powell, Operation Manager
  - 14 years at OZ Optics
- Sarah Miller, Controller
  - 8 years at OZ Optics
- Metin Sezerman, General Manager of OZ Turkey
  - 17 years at OZ Optics
- Bing Li, General Manager of OZ Optics China
  - 14 years at OZ Optics
Company Profile

- ISO 9001:2015 certified
- Broad patent portfolio
- Advanced proprietary processing technology
Company Profile

- Using our strong direct sales and distributors, we address the following markets:
Company Profile

- 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
Facility – Ottawa Headquarters

Production Area

Training Centre Building

Meeting Room

Swimming Pool
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 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
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 and continuous improvement
• Promote opportunities of professional development for all members of our Company through education, training and personal challenge

Ömür Sezerman
President
Competitive Advantage

- Exceptional Quality & Service
- Superior Technology
- Innovative Engineering
- Competitive Pricing
- Extensive Experience In Fiber Optics Manufacturing
- Global Presence
- Success
OZ Optics provides high quality, competitively priced fiber optic products based on a patented tilt alignment technique.

Our products include a laser to fiber coupler with adjustable focus which allows >80% coupling into a singlemode fiber.
Other Products Include:

- Turnkey Laser Diode to Fiber Delivery System
- High Power Laser to Fiber Couplers with Shutters, Attenuators and/or TE Coolers
- Laser to Fiber Delivery Systems for Flow Visualization
- Fiber Collimators & Focusers
- U-Brackets with Removable Optics
- Laser Diode to Fiber Couplers
- Laser Diode Collimators
- Laser Diode Power Combiners
- Fiber Optic Vacuum Feedthroughs
Laser to Fiber Couplers

DTS0049 and DTS0062: Laser to Fiber Coupler with Receptacle (Non-Contact style) and Laser to Fiber Couplers-Pigtail Style

HPUC-23-400/700-P-10AC-11 AND LPSC-03-780-5/125-P-11AS-14-40-3AF-3-3

• > 60% coupling efficiency for SMF & PMF
• Low / High power versions >10 W
• 240 nm to 2200 nm wavelengths
Laser to Fiber Couplers

DTS0049: Laser to Fiber Coupler with Receptacle (Non-Contact style)
HPUC-23-400/700-P-10AC-11

- > 60% coupling efficiency for SMF & PMF
- Low / High power versions >10 W
- 240 nm to 2200 nm wavelengths
Laser to Fiber Couplers

DTS0049 and DTS0062: Laser to Fiber Coupler with Receptacle and Polarization Rotators/Analyzers
HPUC-23AF-633-P –3.5AC-15-POL

- > 60% coupling efficiency for SMF & PMF
- Low / High power versions >10 W
- 240 nm to 2200 nm wavelengths
Laser to Fiber Couplers

DTS0095: Beam Splitters/Combiners
ULBS-12P-4/125-PP-633-90/10-3.9AS-20-40-3AF3AF-3-1

• > 60% coupling efficiency for SMF & PMF
• Low / High power versions >10 W
• 240 nm to 2200 nm wavelengths
Laser to Fiber Couplers with Adjustable Focus

DTS0047: Laser to fiber Coupler with Adjustable Focus

HPUC-2,A3A-400/700-P-3.5AC-1 and QPMJ-A3A,3S-488-3.5/125-3AS-2-1

- > 80% coupling efficiency for SMF & PMF
- SMF, MMF & PMF versions
- 0.1 Micron resolution in focus adjustment
Laser to Fiber Couplers with Adjustable Focus

DTS0047: Laser to fiber Coupler with Adjustable Focus
HPUC-2,A3A-400/700-P-3.5AC-1 and QPMJ-A3A,3S-488-3.5/125-3AS-2-1

- > 80% coupling efficiency for SMF & PMF
- SMF, MMF & PMF versions
- 0.1 Micron resolution in focus adjustment

Laser to Fiber Delivery System Questionnaire
Adjustable Fiber Connectors

DTS0047: Laser to fiber Coupler with Adjustable Focus
HPUC-2, A3A-400/700-P-3.5AC-1 and QPMJ-A3A,3S-488-3.5/125-3AS-2-1

- Use for adjustable focusers & couplers
- Super & angled NTT-FC/PC compatible
- SMF, MMF & PMF versions
Laser to Fiber Couplers
- with Electrically Controlled Attenuators

DTS0048: Laser to fiber Coupler with Attenuator or Shutter
HPUC-23AF-P-633-3.9AS-CLH-DD-485:1-6-MC/RS232

• > 60% coupling efficiency for SMF & PMF
• 60 dB Attenuation range
• 0.5 dB Accuracy, 0.01 dB Resolution
Laser to Fiber Couplers with Shutters

DTS0048: Laser to fiber Coupler with Attenuator or Shutter
HPUC-23AF-633-P-3.9AS-15-SH

• > 60% coupling efficiency for SMF & PMF
• Up to 3 W optical power handling
• Ideal for safety interlocks, remote control
Laser to Fiber Couplers with TE Cooler

DTS0039: High Power Laser to Fiber Couplers with Temp. Control
HPUC-25-1064-M-50PQ-2-TE-DR-PS

- >10 W CW power handling
- 0.1°C Temperature control
- SMF, MMF & PMF versions
**Pigtail Style Collimators / Focusers**

- Standard collimated beam diameter: 0.2 mm to 3.5 mm
- Standard sizes: 1.6 mm, 2.5 mm, 4 mm, 8 mm, 11 mm, 12 mm & 25.4 mm diameter housing
- Up to 1 kW Power

DTS0060: Collimators/Focusers – Pigtail Style
LPC-03-1550-8/125-P-0.44-2AS-40-3A-3-2
LPF-01-1550-8/125-P-3-19.4-5AS-60-3A-3-1
Pigtail Style Collimators / Focusers

DTS0060: Collimators/Focusers – Pigtail Style
LPC-03-1550-8/125-P-0.44-2AS-40-3A-3-2
LPF-01-1550-8/125-P-3-19.4-5AS-60-3A-3-1

• As small as 2 µm waist diameter
• Up to -60 dB Backreflection SMF, PMF; 35 dB MMF
• 240 nm – 2200 nm
Precision Fiber Optic Collimator/Focuser Array

DTS0156: Precision Fiber Optic Collimator/Focuser Array
LPCA-4-250-1550-9/125-S-0.1-30-3A-1-1-0.5

- High density, small footprint
- Evenly spaced linear configuration
- Generate a precise array of collimated/focused spots
Receptacle Style Collimator / Focusers

DTS0094: Collimators and Focusers – Receptacle Style
HPUCO-23-400/700-P-50AC

- 0.2 mm to > 15 mm Beam Diameters
- 240 nm to 2200 nm Wavelengths
- Achromatic Collimators Available
Receptacle Style Collimator / Focusers

DTS0094: Collimators and Focusers – Receptacle Style
HPUCO-T3-400/700-M-3.5AC

• 0.2 mm to > 15 mm beam diameters
• 240 nm to 2200 nm wavelengths
• Achromatic collimators available
Delivery Systems for Flow Visualization

DTS0014: Delivery System for Flow Visualization – Fiber Optic
HPUC...+ FMJ...+ FOLM...

- Uniform intensity along the line
- Up to 1 mm linewidths, 10° to 60° fan angles
- Cross targets also available
U-Brackets with Removable Optics

DTS0022: U-Bracket Assembly – Fiber Optic
UB-01-33-1550-S-S-3.03

• As good as 0.6 dB insertion loss (pigtail style)
• -40, -50, -60 dB Backreflection
• Use with A/O modulators, bulk optics
OEM Laser Diode to Fiber Couplers

DTS0063: Laser Diode to Fiber Coupler – Pigtail Style
LDPC-01-635-4/125-s-40-3S-3-1-35-5LD

• 375 nm to 2050 nm wavelengths
• > 20% Coupling into SMF, to > 60%
• Low cost, rugged & compact size
OEM Laser Diode to Fiber Couplers

DTS0045: Laser Diode to Fiber Couplers
HULD-13-635-S-30-7LD

- 375 nm to 2050 nm wavelengths
- Recommend MMF, > 20% coupling into SMF
- Low cost, rugged & compact size

Laser Diode / LED to Fiber Delivery System Questionnaire
Lab Style Laser to Fiber Couplers

DTS0045: Laser Diode to Fiber Couplers
LDPC-05-635-4/125-S-40-3S-3-1-20-7LD-DR

• 375 nm to 2050 nm wavelengths
• Up to 50% coupling efficiency into SMF & PMF
• PC board mountable, reusable optics

Laser Diode / LED to Fiber Delivery System Questionnaire
TE Controlled Laser Diode Housings

- 0.01 dB Output stability. SMF, PMF & MMF
- Built-in temperature sensor
- 0.1°C Temperature control
Laser Diode Collimators

DTS0043: Laser Diode Collimators
HULDO-41-1310-2AS-PO-SP
HULDO-11-670-2AS-5LD

- 0.6 mm to 4.9 mm Beam diameters
- Adjustable lens can be used as focusers
- Low cost, rugged & compact size
Laser Diode Power Combiners

DTS0044: Laser Diode Power Combiner
ULBS-11P-4/125-P-660/690-PBS-40-3S-3-1-SP

- Up to 45% coupling from each diode
- -40, -50, -60 dB Backreflection SMF, PMF & MMF
- Can combine equal / different wavelengths
Turn Key Free Space or Fiber Pigtailed Laser Diode Modules

DTS0081: Turnkey, Ultra Stable, OEM LD Source OZ-1000 & OZ-2000 Series
OZ-2000-405-3/125-S-40-3S-3A-1-1

- Wide wavelength range 375 nm – 2050 nm
- SM, MM, PM Fiber pigtailed with collimators
- Receptacle versions are also available
Turn Key Free Space or Fiber Pigtailed Laser Diode Modules

DTS0081: Turnkey, Ultra Stable, OEM LD Source OZ-1000 & OZ-2000 Series
OZ-2000-405-3/125-S-40-3S-3A-1-1

- Wide wavelength range 375 nm – 2050 nm
- SM, MM, PM Fiber pigtailed with collimators
- Receptacle versions are also available
Penetrating Vacuum Feedthroughs

DTS0023: Vacuum Pressure Feedthrough – Fiber Optic
VAC-01-V-SMJ-3A3A-1300/1550-9/125-1-1.5

- No intrinsic insertion loss or backreflection
- Low cost, rugged & compact size
- Gas leak rate $10^{-6}$ scc/sec
Vacuum Feedthroughs – Receptacle Style

DTS0023: Vacuum Pressure Feedthrough – Fiber Optic
VAC-3S3S-IRVIS-105/125-M

• Singlemode, polarization maintaining & multimode versions
• Easy to install & use. compact & rugged
• Gas leak rate $10^{-6}$ scc/sec
High Power Fiber Patchcords

DTS0037: High Power Fiber Optic Patchcords
QMMJ-5HP5HP-UVVIS-200/240-3AS-4
QSMJ-A3HP3S-320-2/125-3A-2
QPMJ-A3HPM3S-488-3.5/125-3-5-1

• MMF, SMF & PMF Versions
• Armored cable available for safety
• Near UV to short-wave infrared wavelengths
• Adjustable connector combination for extra flexibility
High Power Fiber Patchcords

DTS0037: High Power Fiber Optic Patchcords
QMMJ-A3AHP,2F-UVVIS-100/140-3-10
QMMJ-A3AHPM,3AF-IRVIS-50/125-3-2
QMMJ-A3AHP,M,3AF-IRVIS-20/125-5AS-1-AR-CSP
QMMJ-A5HPL,5HPL-UVVIS-200/240-5AS-5

Versions Offered:

- **HP**: High power polish, air gap connector
- **HPM**: High power mechanical cleave, air gap connector
- **HPC**: High power coreless fiber end cap, air gap connector
- **HPL**: High power laser treated end face, air gap connector
High Power Fiber Patchcords

Versions Offered:

• HP: High power polish, air gap connector
• HPM: High power mechanical cleave, air gap connector
• HPC: High power coreless fiber end cap, air gap connector
• HPL: High power laser treated end face, air gap connector

DTS0037: High Power Fiber Optic Patchcords
QMMJ-A3AHP,2F-UVVIS-100/140-3-10
QMMJ-A3AHPM,3AF-IRVIS-50/125-3-2
QMMJ-A3AHPC,X-IRVIS-20/125-5AS-1-AR-CSP
QMMJ-A5HPL,5HPL-UVVIS-200/240-5AS-5
High Power Fiber Patchcords

DTS0037: High Power Fiber Optic Patchcords
QMMJ-A3AHP,2F-UVVIS-100/140-3-10
QMMJ-A3AHPM,3AF-IRVIS-50/125-3-2
QMMJ-A3AHPC,X-IRVIS-20/125-5AS-1-AR-CSP
QMMJ-A5HPL,5HPL-UVVIS-200/240-5AS-5

Versions Offered:

• HP: High power polish, air gap connector
• HPM: High power mechanical cleave, air gap connector
• HPC: High power coreless fiber end cap, air gap connector
• HPL: High power laser treated end face, air gap connector
• Multiple watts CW power handling
• Temperature, contact or proximity sensors for safety interlock
• SMA 905 or FC receptacles
High Power Shutters/Bulkhead Receptacles With Safety Interlocks

- Multiple watts CW power handling
- Temperature, contact or proximity sensors for safety interlock
- SMA 905 or FC receptacles
High Power Shutters/Bulkhead Receptacles With Safety Interlocks

- Multiple watts CW power handling
- Temperature, contact or proximity sensors for safety interlock
- SMA 905 or FC receptacles
High Power Shutters/Bulkhead Receptacles With Safety Interlocks

- Multiple watts CW power handling
- Temperature, contact or proximity sensors for safety interlock
- SMA 905 or FC receptacles
High Power Shutters/Bulkhead Receptacles With Safety Interlocks

- Multiple watts CW power handling
- Temperature, contact or proximity sensors for safety interlock
- SMA 905 or FC receptacles
High Power Shutters/Bulkhead Receptacles With Safety Interlocks

- Multiple watts CW power handling
- Response speed of < 30 ms
- Temperature, contact or proximity sensors for safety interlock
- SMA 905 or FC receptacles
High Power Shutters/Bulkhead Receptacles With Safety Interlocks

- Multiple watts CW power handling
- Response speed of < 30 ms
- Temperature, contact or proximity sensors for safety interlock
- SMA 905 or FC receptacles
Hybrid Patchcords

DTS0082: Universal Connectors and Hybrid Patchcords
AA-200-11-9/125-3A3S

• Angled, super, ultra, FC/PC, ST, SC connectors
• Male to male, male to female versions
• Low cost, rugged & compact size
Universal Connectors

DTS0082: Universal Connectors and Hybrid Patchcords
AA-200-3SC

• Available for FC, ST, SMA, SC & LC
• Less than 0.3 dB insertion losses
• Patch panel mountable, duplex styles
Sleeve Thru Adaptors

DTS0004: Connectors, Patchcords, Bulkhead Receptacles & Sleeve Thru Adaptors
SMC-03 and PMC-03
HLPC-SMA/M

• Available for FC, ST, SMA, SC & LC
• Less that 0.3 dB insertion losses
• Patch panel mountable, duplex styles
Bare Fiber Adaptors

DTS0003: Bare Fiber Adaptors
BARE-03-82-M

• Used to hold bare fibers
• FC, SC, ST, SMA connectors available with spring loaded and magnetic clips versions.
• Reusable, inexpensive
Bulkhead Receptacles

DTS0004: Connectors, Patchcords, Bulkhead Receptacles & Sleeve Thru Adaptors
HLPC-NTT/FC-PM
HLPC-ATT/ST-SM

•Available for FC, ST, SMA, SC, LC, E2000
•Angled FC, ST, SC, LC, E2000
•Designed for free space use, compact size
Fused Fiber Optic Couplers

DTS0033: Fused Couplers – Fiber Optic
FUSED-12-780-5/125-50/50-3A3A3A-3A-0.5-PM

• 1x2, 2x2 & 1xN Couplers available
• 0.5 dB Typical excess losses, SMF & MMF
• 488 nm to 2050 nm Wavelengths
Fused Fiber Optic Couplers

DTS0033: Fused Couplers – Fiber Optic
FUSED-12-1550-8/125-50/50-3S3A3A-1-1-PM

- 1x2, 2x2 & 1xN Couplers available
- 0.5 dB Typical excess losses, SMF & MMF
- 488 nm to 2050 nm Wavelengths
Fused Fiber Optic Couplers

DTS0033: Fused Couplers – Fiber Optic
FUSED-12-633-4/125-80/20-3A3A3A-3-1

- 1x2, 2x2 & 1xN Couplers available
- 0.5 dB Typical excess losses, SMF & MMF
- 488 nm to 2050 nm Wavelengths
Fused Fiber Optic Couplers

DTS0033: Fused Couplers – Fiber Optic
FUSED-14-532-3.5/125-25/25/25/25-3A3A3A3A3A-1-0.5-SP

• 1x2, 2x2 & 1xN Couplers available
• 0.5 dB Typical excess losses, SMF & MMF
• 488 nm to 2050 nm Wavelengths
Fiber Pigtailed Isolators

DTS0016: Isolators – Fiber Optic

- ≤ 0.8 dB IL, as good as 60 dB Isolation
- -40 dB, -50 dB, -60 dB Backreflection SMF & PMF
- 532 nm to 2050 nm Wavelengths
Fiber Pigtailed Isolators

DTS0016: Isolators – Fiber Optic
FOI-11-11-1064-6/125-P-40-3A3A-1-1-30-HP

- ≤ 0.8 dB IL, as good as 60 dB Isolation
- -40 dB, -50 dB, -60 dB Backreflection SMF & PMF
- 532 nm to 2050 nm Wavelengths
Fiber Pigtailed Isolators

DTS0016: Isolators – Fiber Optic
FOI-11-11-633-4/125-P-40-3A3A-3-1-35

- ≤ 0.8 dB IL, as good as 60 dB Isolation
- -40 dB, -50 dB, -60 dB Backreflection SMF & PMF
- 532 nm to 2050 nm Wavelengths
Wave Division Multiplexers

DTS0089: Wave division Multiplexers
WDM-13P-1111-405/532/650-3.5/125-SSSS-40-3A3A3A3A-3-1

- $\leq 0.8$ dB Insertion losses, 65 dB isolation
- Up to 2 watt power handling
- -40 dB, -50 dB, -60 dB Backreflection
RGB Wave Division Multiplexers and Delivery Systems

DTS0089 and DTS0117: Wave division Multiplexers, White Light (RGB Laser Sources)
WDM-14-33333-690/750/797/847-50/125-MMMMM
RGB-100-442/532/635-3.5/125-P-3A-3AS-1-15

• Combines red/green/blue visible wavelengths
• Two, three, and four wavelength versions
• MM, SM and PM Fiber versions
Gold / AR / HR Coated Fiber Ends

DTS0020: Reflectors- Fiber Optic (Fixed or Variable)
FORF-11P-1300/1550-9/125-S-3S-3A-1
FORF-31P-1550-50/125-M-X-1-1-HR

- Gold over >96% , AR: < 0.1% reflection levels
- High reflection coating >99% reflection
- 700 nm to 2000 nm Wavelengths
- SMF, MMF & PMF Versions
Variable Fiber Reflectors

DTS0020: Reflectors- Fiber Optic (Fixed or Variable)
FORF-21P-1550-9/125-S-60-50-3A3A-3-1

- Used for backreflection measurements
- 0.6 dB Typical insertion losses, SMF, MMF & PMF
- Available from 400 nm to 2000 nm
Fiber Optic Filters

DTS0031: Fixed and Removable Filters
FF-11-1064-6/125-P-40-XX-3-1-1.4-HP2
RFF-11-1064-6/125-P-40-XX-1-1-CSP-HP

- 400 nm to 2200 nm Wavelengths, SMF, PMF & MMF
- -40 dB, -50 dB, -60 dB Backreflection
- Filters can be fixed or removable
Fiber Optic Educational Kits

- Teaches basics of fiber optics
- Easy to use, affordable
- Wide range of labs available

DTS0015: Educational Kits - Fiber Optic
FOEK-03-1,2,3,4,5-633-M-11-NTSC

www.ozoptics.com
Fiber Optic Termination Kits

DTS0021: Termination Kits - Fiber Optic  
OFOC-01-3

• For FC, ST, SMA or SC Connectors

• Contains all the necessary polishing films, tools, epoxies & accessories
Alignment Kits and Tools

DTS0097: Alignment Tools and Kits
START-03AF-USB-IRVIS

• Simplify alignment of laser to fiber couplers
• Available with video instructions on USB stick
• Polarization alignment tool simplifies polarization alignment
• Torque screwdriver
OZPEN™ CO₂ Fiber Optic Cleaning Unit

- Superior removal of contaminants on fiber optics and other components
- Quick and dry solvent free cleaning process
- Cleans variety of substrates
- Designed to clean small surface area
- Ideal for high power applications
Your solution provider for existing and next generation fiber optic components and test equipment

Please Contact Our Sales Dept:
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Toll Free: 1-800-361-5415
Email: sales@ozoptics.com.
Thank You for Choosing OZ!