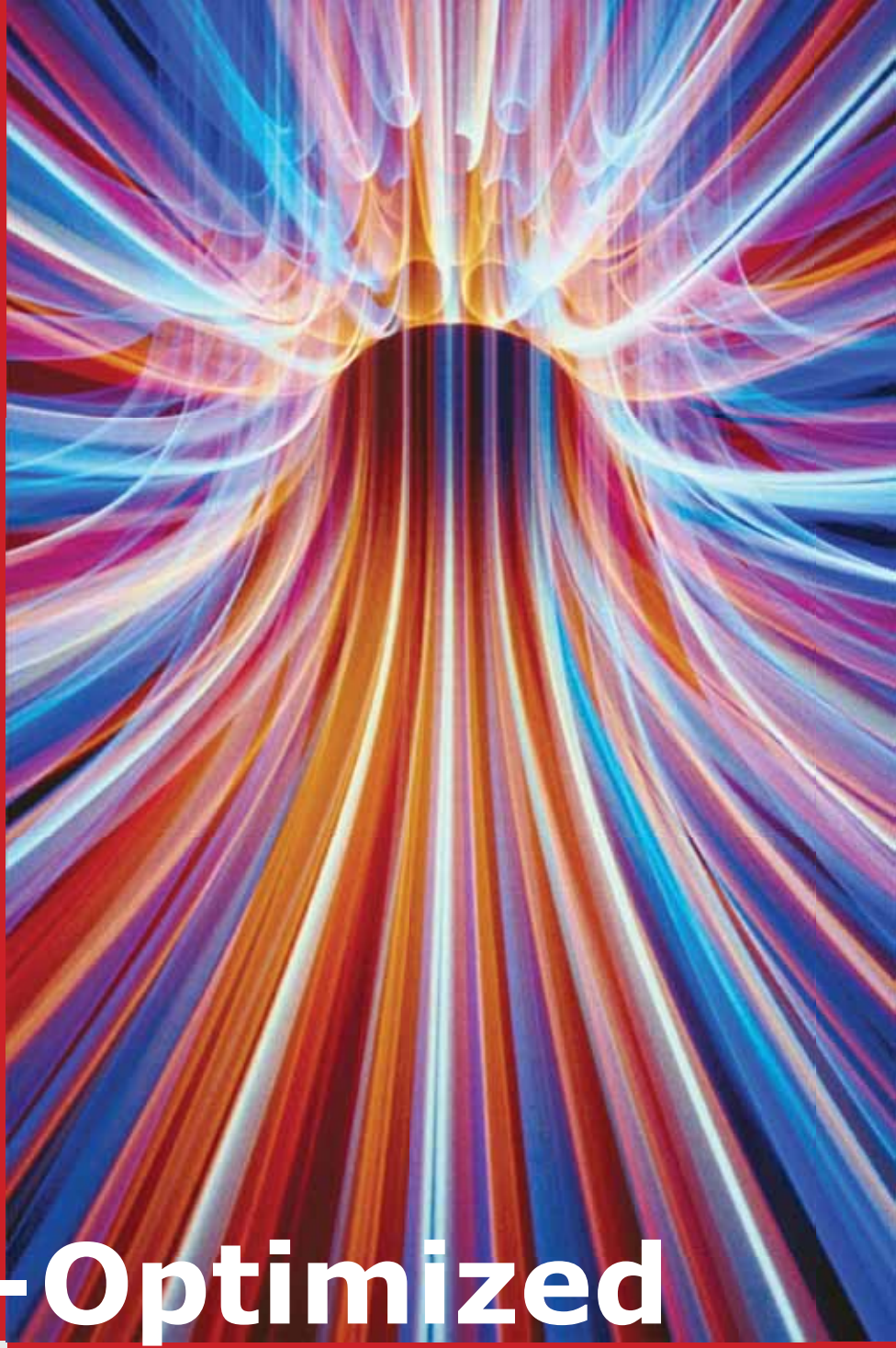
ofs

A Furukawa Company

As fiber deployments get closer to the consumer and the desire for bandwidth grows exponentially, the need for bend-optimized fibers is also exploding. As a leading designer of innovative solutions, OFS Laboratories has a long tradition researching optical bend-capability and transforming industry-leading discoveries into real-world products. Today OFS bends the rules of optical fibers – by offering a complete portfolio of bend-optimized technologies that meet the most demanding requirements of communications, fiber-to-the-home (FTTX), cable television, medicine, industrial applications, and many other uses.

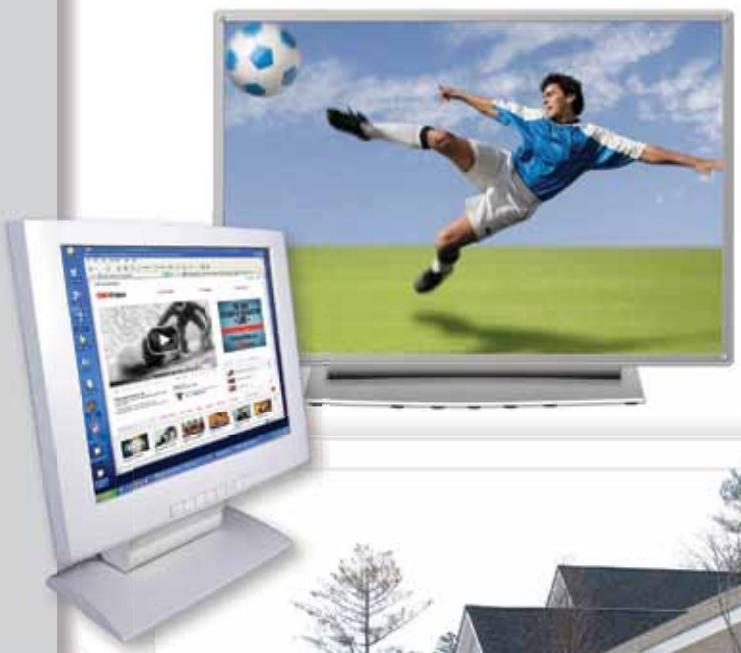


Bend-Optimized Solutions from OFS

Supported by Years of Research and Leadership

www.ofsoptics.com

A Long Heritage of Bend-Optimized Innovations



2009 — **OFS launches New EZ-Bend 4.8 and 3.0 drop cables,** featuring ultra-bend insensitive EZ-Bend Technology with a solid glass construction

2007 — EZ-Bend™ Optical Technology

OFS introduces EZ-Bend™ Optical Technology to support multiple dwelling unit (MDU) and in-home wiring (IHW) applications. Cables featuring EZ-Bend Optical Technology can be bent to a 5 mm radius and can be stapled

2007 — **OFS introduces optical fibers with new hard clad silica (HCS®) fiber coating** that can be bent to diameters as tight as 5 mm

2006 — AllWave® *FLEX* Fiber Zero Water Peak

AllWave *FLEX* Fiber, the industry's first bend-insensitive zero water peak single-mode fiber, is launched.

2003 — AllWave® Fiber Zero Water Peak

OFS introduces AllWave Zero Water Peak (ZWP) Fiber, the first full spectrum ZWP offering in the industry

2003 — **OFS announces significant bend-performance improvements to its Blue Tiger High Performance Jumpers**

2001 — Lucent Technologies Bell Labs Innovations Optical Fiber Solutions

Lucent Technologies launches Blue Tiger™ High Performance Jumpers, which resist bending and take full advantage of the entire optical spectrum

1998 — AllWave® Fiber

Lucent Technologies introduces AllWave® Fiber, a low water peak solution that provided 50 percent more usable wavelengths than the available conventional fibers

1984

AT&T introduces the most widely deployed bend-capable fiber, known as depressed cladding fiber or protected core fiber

AT&T Network Systems Group

1980's — **AT&T patents a bend-capable trench-assisted fiber design** for undersea cable applications

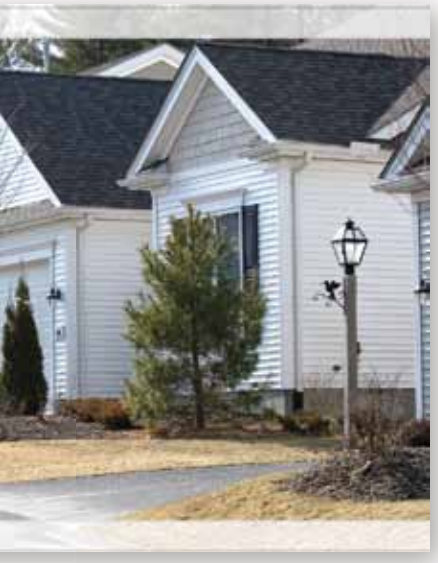
OFS' family of bend-optimized solutions include **AllWave® *FLEX* Fiber**, the industry's first bend-insensitive zero water peak single-mode fiber, and **EZ-Bend™ Optical Technology**, that enables ultra bend-insensitive cables.

AllWave *FLEX* Fiber

AllWave *FLEX* Fiber offers a G.657-A bend-optimized design that is compliant with the installed base of G.652D fiber for indoor applications, and certain outside plant (OSP) products and solutions for bend radii down to 10 mm. It provides low macro-bend and micro-bend loss, seamless splicing and future proofing capability through its low PMD and ZWP performances.

Applications:

- Outdoor
  - Drop cables for FTTX deployments
  - OSP small-diameter cables
  - Low temperature environments.
- Indoor
  - Central Office (CO) connectivity solutions
  - Fiber distribution hubs
  - Premises cables.



Benefits:

- ITU-T G.657A, G.652D compliant
- Excellent ZWP performance
- 8.9 µm Mode Field Diameter (MFD) for low splice loss
- Compatible with both core and clad alignment splicers without need for special splicing recipes
- Early bend warning for risky bends to reduce risk of service disruptions
- Exceptional Polarization Mode Dispersion (PMD)
- Solid construction that allows for uniform performance and excellent mechanical reliability
- Excellent micro-bending, ideal for smaller diameter cables that can decrease duct congestion and boost fiber density
- Extended system reach enabled by better attenuation provided by ZWP fiber
- Connector polishing and cleaning with identical process used with conventional G.652D fibers.

EZ-Bend Optical Technology

Cables featuring EZ-Bend Optical Technology offer a G.657-C ultra bend-insensitive design optimized for MDU and IHW installations using fast, low skill processes traditionally used for in-residence copper wires. EZ-Bend cables protect the optical fiber from the destructive conditions encountered in MDU installations, such as stapling and multiple 90 degrees bends under tension, and provide ultra-low macrobend loss down to radii of 5 mm. The technology is backward-compatible with "standard" G-652 and previous technologies.

Applications:

- Drop Cables for Multiple Dwelling Units (MDUs)
- In-home wiring (IHW) around corners, behind moldings, or in tight spaces
- Special cable needs (military applications, HDTV, industrial uses).

Benefits:

- Much better performance than that required by the G.657B standard
- Solid, synthetic silica glass construction that enables uniform macro-bending loss axially and in all bending planes
- Easy splicing to EZ-Bend Technology fiber and conventional G.652D with core and clad alignment splicers
- Connector polishing and cleaning with identical process as used with conventional G.652D fiber.

Bend-Optimized Solutions from OFS

OFS is uniquely focused on full optical path optimization, offering end-to-end solutions that include fiber, cable and connectivity components, plus the expert assistance our customers need to get exceptional value from their optical infrastructures. Our products benefit from a long heritage that dates back to Alexander Graham Bell and includes technology powerhouses such as AT&T, Lucent Technologies and Bell Labs. OFS is shaping the future of bend-optimized fibers by pioneering the application of research discoveries to solve emerging real-world challenges.

More information:

► READ

Visit www.ofsoptics.com, "OFS in the Media" section, for articles related to bend-optimized solutions by OFS published in industry magazines:

- BOF (Bend-Optimized Fibers) for Big Performance – Communications News Magazine
- Bend-Capable Fibre Variations Target Applications Needs – Lightwave Europe
- Bend-Optimized Fibers are Best Chosen by Application – FTTH Prism.

► WATCH

Watch Solution Videos at www.ofsoptics.com, "OFS Product Videos" section:

- EZ-Bend Optical Technology
- OFS AllWave *FLEX* Jumper Performance.

Videos are also available at:
www.youtube.com/ofsmarcom

For additional information please contact your sales representative. You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) from inside the USA or 1-770-798-5555 from outside the USA.

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