

OFS Develops Multicore Fibers (MCF) for its Submarine Fiber Portfolio

OFC 2023, Booth 3229, San Diego, California, March 6, 2023 – OFS, a leading designer, manufacturer, and supplier of innovative fiber optic network products, announces the development of multicore fiber for its ocean product portfolio. TeraWave® SCUBA 4X Multicore Ocean Fiber is designed to optimally deliver four times the bandwidth in ocean applications using a four-core space division multiplexing (SDM) technology.

As submarine communication networks evolve to support net data rates of 1 Petabit/sec and higher, it is clear that *revolutionary*, not *evolutionary*, change is required in the wet plant hardware. SCUBA 4X multicore fiber will form the foundation of a new generation of transmission technologies, designed to break through the bandwidth limitations of single-core optical fibers. With excellent transmission properties in C- and L-bands, SCUBA 4X has a demonstrated attenuation below 0.165 dB/km at 1550 nm and industry-leading adjacent core crosstalk of – 70 dB/km at 1550 nm. Other properties will be consistent with G.654.B/C compliant submarine fibers (9.7 mm mode field at 1550 nm, cutoff wavelength below 1520 nm, and standard cladding and coating dimensions).

"OFS and FEC are committed to be industry leaders in SDM-based communication technology, with a comprehensive product portfolio encompassing fiber, connectivity and fusion splicing," said David DiGiovanni, Chief Technology Officer of OFS and President of OFS Labs. "We are working with several key customers as they adopt this ground-breaking increase in bandwidth density."

Two related presentations will be given at the OFC conference: *Polarity and Twist Rate Detection for Accurate and Reliable Low Loss Multicore Fiber Fusion Splicing* (Tu2C.1) delivered by Tristan Kremp of OFS Laboratories, and *Low Fusion Splice Loss Technique for Multicore Fiber with 2- and 3-Electrode Fusion Splicers* (Th2A.10) delivered by Toshiyuki Fujii of Furukawa Electric Co., Ltd.

More information on SCUBA 4X multicore fiber, complementary Fitel fan-in/ fan-out devices, and live demonstrations of the Fitel S185 PM ROF multicore fusion splicer can be found at OFS booth 3229, March $7 - 9^{th}$ at OFC.

About OFS

OFS is a world-leading designer, manufacturer, and provider of optical fiber, fiber optic cable, connectivity, fiber-to-the-subscriber (FTTx), and specialty fiber optic products. We put our development and manufacturing resources to work creating solutions for applications in such areas as telecommunications, medicine, industrial networking, sensing, aerospace, defense, and energy. We provide reliable, cost-effective fiber optic solutions that help our customers meet the needs of consumers and businesses today and into the future.

Headquartered in Norcross (near Atlanta) Georgia, U.S.A., OFS is a global provider with facilities in several countries worldwide. OFS is part of Furukawa Electric Group, a multi-billion-dollar leader in optical communications.

Please visit www.ofsoptics.com or www.ofsoptics.com/multicore-optical-fiber.

###

OFS PR Contact:

Sherry Salyer <u>shsalyer@ofsoptics.com</u> +1 (770) 798 4210