Press Release

CeramOptec Optran® UVWFS: low-loss broadband fibers, ranging from UV-C to IR-B

Wide-range light spectrum applications can now be implemented with a new type of fibers.

Optran® UVWFS fibers from CeramOptec represent an efficient type of broadband fibers for optical applications with a wide spectral range. The fibers combine the characteristics of UV and infrared fibers, as well as convincing, excellent transmission values.

Bonn, January 23, 2017 – CeramOptec, the established manufacturer of multimode light wave conductors, introduces a new broadband fiber for optical applications with a wide spectral range. Optran® UVWFS quartz glass fibers are suitable for wavelengths from 200 to 2000 nm, i.e. they cover nearly the entire light spectrum from distant UV light (UV-C) to long-wave near infrared light (IR-B). Due to this combination of characteristics from UV and infrared fibers, it is no longer necessary to use an assortment of fibers for the transmission of short and longwave light. Numerous applications in the areas of spectroscopy, analytics, sensorics, astronomy and aerospace will be implemented with a single type of fiber.

Optran® UVWFS fibers are based on the successful Optran® UV and Optran® WF fibers form CeramOptec. The core material has an OH content which is between UV and WF material. Just like them, they provide a convincing performance due to their very low attenuation loss.

Optran® UVWFS fibers consist of an undoped core with a fluorine-doped jacket, with standard core-jacket ratios of 1:1.06 and 1:1.4, as well as numerical apertures (NA) of 0.12 and 0.28. Customized designs are available upon request. The smallest bending radius amounts to 50 times the jacket or 300 times the core diameter. The protective polyimide jacket has a tensile strength of 70 kpsi (kilo-pound per square inch) and withstands temperatures from -190°C to up to +350°C.

Please check online for additional information about CeramOptec and the Optran® UVWFS fibers at www.ceramoptec.de/products/fibers/optran-uv-wf
About CeramOptec
Bonn based CeramOptec GmbH specializes in manufacturing quartz glass multimode lightwave conductors. The mid-size company has been established in 1988 and is nowadays part of the biolitec AG, one of the leading medical technology companies in the world, with a focus on laser technology. CeramOptec maintains a strong presence, not only in Europe, but also on Asian and North American markets with its subsidiaries in China and distribution partners in the USA, India, Japan and Korea. Its range of products includes fibers, fiber bundles, assemblies and cables for numerous application areas, among them industrial and medicinal laser applications, sensor systems for the aerospace sector, as well as spectroscopic applications for astronomy and the chemical industry. Another specialty is the production of optical fiber cores with rectangular or octagonal geometries (Non Circular Core Fibers/NCC), which are mainly used in astrophysics. CeramOptec has a total staff of 245 associates and currently maintains production facilities in Bonn and Livani (Latvia).