Small Core Mid-IR Fiber Enables High Power Handling Over Smaller Bend Radius

IRphotonics (MD&M West Booth 568), a leading provider of advanced infrared fiber and materials, offers its new small core High Power Multimode mid infrared fiber (H100) targeting medical, industrial, and R&D applications. The H100 mid-IR fiber offers a spectral transmission from 0.3 to 4.5 um with low attenuation and no spectral absorption peak. Its small core enables high power handling over small bend radius from a wide range of lasers such as Er:Yag (2.94 um), semiconductor lasers (QCL), solid state lasers, or tunable MWIR lasers (OPO).

“This small core fiber is a step forward for the industry. It opens the way for a whole new range of applications not possible before with energy delivery in the MWIR,” commented Antoine Kasprzak, director of business development for IRphotonics. “Our unique expertise and patented manufacturing process translates into fiber with superior optical, mechanical, and environmental properties compared to other infrared fiber technologies.”
The H100 mid-IR fiber offers spectral transmission from 0.3 to 4.5 um, low attenuation with no significant spectral absorption peaks up to 4.5 um, fiber core diameter 100 um, dual clad design for higher power handling, numerical aperture of 0.2 (0.3 or other NA possible on demand), high laser damage threshold, and bend insensitivity down to 1.0 in. The H100 mid-IR fiber is offered bare or in a patchcord with high power connectors, and is available to customers worldwide.