

## CVI Introduces Optics for Fiber Laser Applications

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CVI is introducing a new line of mirrors and new anti-reflection wavelengths for transmissive optics designed specifically for the distinct fiber laser wavelengths. CVI has optimized coatings for both wavelength and for laser damage characteristics.

“Fiber lasers are gaining ground in a variety of applications such as drilling, welding, foil cutting, laser marking, and precise micromachining. Fiber lasers have found a processing and research niche where Nd:YAG lasers are too expensive or have beam properties which are undesirable (e.g. large M2 values). More tightly focused

beams are possible, resulting in sharper images for marking and finer cuts for micromachining. Manufacturing working distances can also be increased. Thus, CVI is expecting to face a growing demand in dedicated optical components designed for fiber laser applications,” explains Bob Soales, VP of Sales and Marketing.

“To anticipate that demand, CVI has been researching the technology and spoken with major fiber laser manufacturers to understand the customer’s needs. We are pleased to announce a specific new mirror product, the FLM, new wavelengths for partial reflectors and output couplers, and anti-reflection coating designs tailored expressly for lenses, beamsplitters, and waveplates,” states Emily Kubacki, Senior Optical Engineer.

Narrowband anti-reflection coatings have been designed to withstand greater than 10MW/cm<sup>2</sup> CW average laser power at 1064 nm on fused silica substrates. High reflectivity mirrors have been designed to withstand greater than 10J/cm<sup>2</sup> 20 ns 20 Hz pulses at 1064 on fused silica substrates. Fiber laser design wavelengths have now been incorporated into the mirrors, partial reflectors, lenses, windows, beamsplitters, and quartz waveplates product lines. For specific information on the fiber laser optics follow this link [“Optics for Fiber Lasers”](#).

CVI is a leading manufacturer of optical components, providing engineering, rapid prototype delivery, high volume production, and system integration for challenging optical requirements. Headquartered in Albuquerque, New Mexico, CVI operates manufacturing facilities in New Mexico, the British Isles, and South Korea with sales representatives and distributors located worldwide.

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