

HPR – HIGH POWER REFLECTOR FOR FIBER LASERS

The PowerSpectrum™ - HPRs are optimized Fiber Bragg Grating-based reflectors especially designed for industrial high-power fiber lasers.



In high-power fiber laser systems, the high and low reflectors are mission-critical elements that have a significant impact on the system's performance and reliability.

This is why TeraXion's "no compromise" approach in the design and manufacturing of the PowerSpectrum™ – HPRs makes them the best overall devices to use when it is time to make high-quality fiber laser systems.

TeraXion takes great care in optimizing the design and the manufacturing process to guarantee a long life expectancy and sustained performances.

Features

- Up to 5 kW power handling
- 1020 to 2100 nm center wavelength
- High reflectors (> 99%) with 0.1 to 5 nm bandwidth
- Low reflectors (2-90%) with 0.1 to 5 nm bandwidth
- Thermal slope as low as 0.025°C/W
- Different fiber sizes available

Benefits

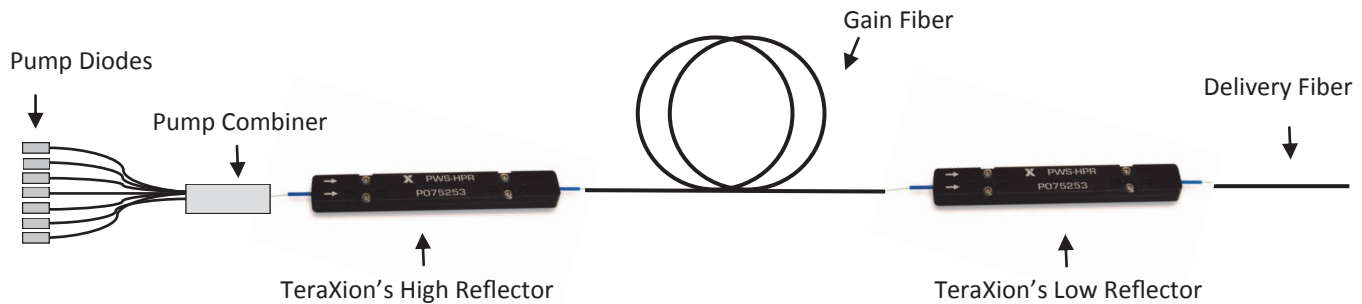
- Optimized heat dispersion
- Excellent performance
- Outstanding reliability
- Best in its class for quality/price ratio

Specifications

Parameter	Unit			
Fiber core/cladding diameter ⁽¹⁾	μm	5-25/125	5-25/200-250	5-25/400-480
Typical operating wavelength	nm	1020-1150 (Ytterbium) ; 1520-1620 (Erbium/Ytterbium) ; 1900-2150 (Thulium)		
Custom operating wavelength	nm	Also available 800-2400		
Bandwidth	nm	0.1 to 5		
Power handling (bare)	W	200	300	1000
Power handling (with heat dissipation package)	W	600	900	3000
Package dimensions	mm	55 x 10 x 5		
Fiber type		SC, DC, TC, PM or non-PM		
Reflectivity		HR Single Mode at 99.9%, LMA at 99% and OC at 2% to 90%		

(1): Triple clad also available: Power handling (bare) and Power handling with heat dissipation package at 5000 W

Typical Fiber Laser Configuration



MKT-FTECH-PWS-HPR 201312-3.1

Ordering information

For orders, questions, specific requirements or to learn more about TeraXion's products, contact us at

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