

# Buccaneer

## Er-doped Femtosecond OA Fiber Laser

Femtosecond pulsed lasers are used in a growing number of applications in physics and the life sciences including material processing, multi-photon imaging, pump-probe spectroscopy and parametric generation. As the number of applications for ultrafast lasers grows so does the need for small and reliable, low noise femtosecond pulse sources. Mode locked femtosecond lasers based on Er-doped nonlinear optical fiber offer an alternative to conventional Ti:Sapphire and Cr:forsterite femtosecond laser systems. Fiber lasers do not require the expensive pump lasers that traditional solid-state femtosecond lasers do and are assembled from established telecommunication components, further reduction the system cost.



### Femtosecond Fiber Laser

#### Advantages:

- Turnkey operation
- Small footprint
- Affordable cost
- Stable and compact
- Great teaching tool

### SPECIFICATIONS

Average Power Output:	>100 mW
Pulse Width:	150 - 300 fs
Repetition Rate:	(fixed) 70 ±3 MHz*
Wavelength:	1560 ± 10 nm
Spectral Width:	> 35 nm
Repetition Rate Stability:	better than 1 part in 10 <sup>6</sup>
Power Output:	100 mW (free space, linear polarized)
Optical Output:	FC/APC (~1 mW)
Operating Temperature:	22 ±5°C
Warm Up Time for Rated Accuracy:	90 min
Electrical Data:	110 .. 230 VAC, 50/60Hz
Dimensions:	Oscillator (180 mm x 210 mm x 70 mm) Power unit (290 mm x 200 mm x 100 mm)

\* Optional alternative repetition rates: 60 to 80 MHz

Using standard fiber components, fiber based femtosecond lasers offer robust and stable operation without the need for constant realignment. The low cost and stability of fiber lasers means that even basic research labs can have a femtosecond pulse source without the need for expensive or complicated equipment.

**DEL**  **MAR PHOTONICS**

4119 Twilight Ridge, San Diego, CA 92130, USA Tel:: (858) 876-3133 Fax:: (858) 630-2376  
E-mail:: sales@dmphotonics.com URL:: www.dmphotonics.com