

# FEMTOLITE FD/D-FD-1000S

## Product Features

- Fiber-delivered fs pulse by optical cable
- Ideal for excitation of YFP, RFP, RCaMP, and others for imaging at a depth > 500  $\mu\text{m}$
- Attachable directly to existing microscopes
- Integrated high speed blanking (< 1  $\mu\text{s}$ ) and variable power function
- All-in-one-box design



## Applications

- Fluorescence Protein Imaging
- In-vivo Imaging

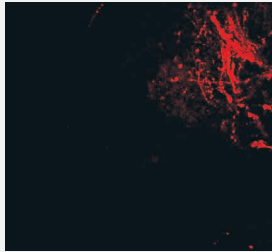
## Specifications

Wavelength	1045 nm
Average Power	$\geq 1$ W
Pulse Duration	$\leq 200$ fs; either at sample or fiber
Repetition Rate	$50 \pm 5$ MHz
Power Modulation	Modulator included (speed < 1 $\mu\text{s}$ )
Beam Quality	$M^2 < 1.3$
Laser Size	500 x 540 x 270 mm <sup>3</sup>
Operational Temperature	20 - 30 °C
Fiber Length	3 - 4 m, $\Phi$ 7.7 mm flexible armored cable

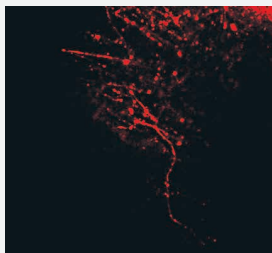
## Brain nerve cell of mouse (Td-Tomato)

Femtolute FD/D-FD-1000S

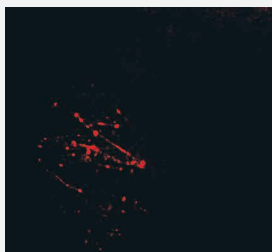
$\lambda = 1045 \text{ nm}$ ,  $P_{\text{obj}} = 180 \text{ mW}$



Depth = 100  $\mu\text{m}$



Depth = 300  $\mu\text{m}$



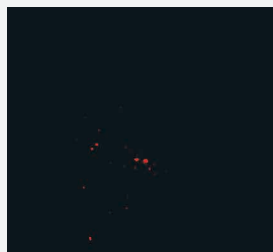
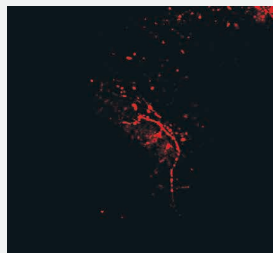
Depth = 500  $\mu\text{m}$

Ti:S laser

$\lambda = 920 \text{ nm}$ ,  $P_{\text{obj}} = 330 \text{ mW}$

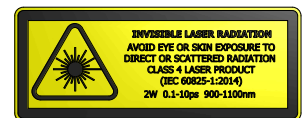
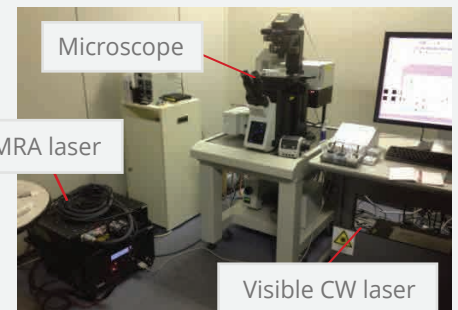
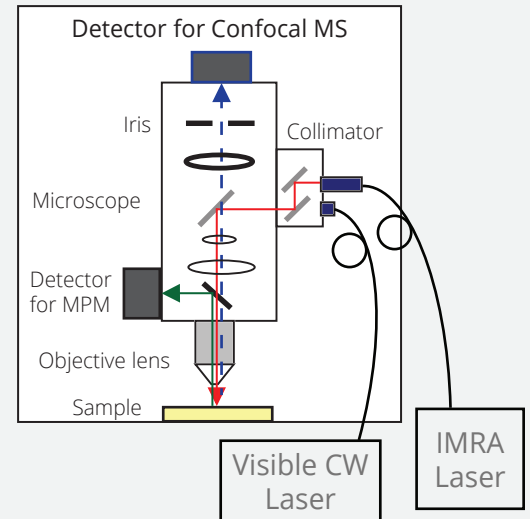


Undesired Autofluorescence



Courtesy of Prof. Miyawaki lab at RIKEN in Japan

## Add-on feature for microscope



FD/D-FD-1000S Warning Label



NOTE: Specifications and features may change without notice

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