

# Femtolite FD/D-FD-1000S

- **Fiber Delivery**
- **> 1 W output**
- **$\leq 200$  fs at 1045 nm**
- **High Speed Power Modulation**



	Specification
Center wavelength	1045 $\pm$ 10 nm
Average power	>1.0 W
Pulse duration	$\leq 200$ fs either at sample or fiber output
Repetition frequency	50 $\pm$ 5 MHz
Power modulation	AOM included (Modulation speed: <1 $\mu$ s)
Beam quality (M <sup>2</sup> )	<1.3
Cooling	Air-cooling
Laser Size	500(W) x 540(D) x 270(H) mm
Operational temperature	20-30°C
Fiber length	3-4 m, $\Phi$ 7.7 mm flexible armored cable

# Multiphoton Microscopy Applications

- **Directly attachable to existing microscopes**
- **Ideal for excitation of YFP, RFP, RCaMP, and others for imaging at a depth >500  $\mu\text{m}$**
- **High speed blanking (<1  $\mu\text{s}$ ) and variable power function integrated**
- **No need for optical table**

### Add-on feature for microscope

Detector for Confocal MS

Iris

Collimator

Microscope

Detector for MPM

Objective lens

Sample

Visible CW Laser

IMRA Laser

Microscope

IMRA laser

Visible CW laser

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

	Femtolite FD/D-FD-1000S $\lambda = 1045 \text{ nm}, P_{\text{obj}} = 180 \text{ mW}$	Ti:S laser $\lambda = 920 \text{ nm}, P_{\text{obj}} = 330 \text{ mW}$
depth = 100 $\mu\text{m}$		
depth = 300 $\mu\text{m}$		
depth = 500 $\mu\text{m}$		

Courtesy of Prof. Miyawaki lab at RIKEN in Japan

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Specification and features may change without notice

