In-vivo Ca\(^{2+}\) fluorescence measurement through optical fiber

Improved design using **new detectors** with superior capabilities

Optional output signal filter improves signal to noise ratio

Available with multiple fibers

**Typical Ca\(^{2+}\)-Traces:**

**Upper trace:**
Slow calcium waves (isofluorane 1.5%)
spontaneous activity (200 \(\mu\)m fiber)

**Lower trace:**
Same measurement as above,
visually evoked (*) and spontaneous slow calcium waves

Ca\(^{2+}\) fluorescence indicator OGB-1 was injected into the visual cortex of a mouse.
Data kindly provided by Dr. A. Stroh and M. Schwalm.

REF: [Monakhov et al. (2019)](https://doi.org/10.1101/536359) Bright near-infrared genetically encoded voltage indicator for all-optical electrophysiology.

LPBF-02GD
Dual Filter for FiberOptoMeter

- Improves signal-to-noise ratio
- Covers full FOM offset range
- 8-pole Bessel filter
- Gain x1... x100

LDU-01D
Laser Driver Unit

- Optogenetic stimulation with 360 nm, 473 nm, 532 nm, 561 nm or 589 nm
- Fiber connector
- High Output Power (>100mW CW at Fiber End)
- Analog Modulation or TTL gate (max. Frequency: 1 kHz)