

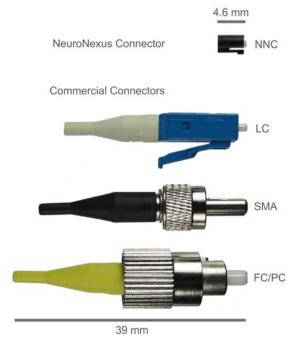
#### **Chronic Optoelectrode Package**

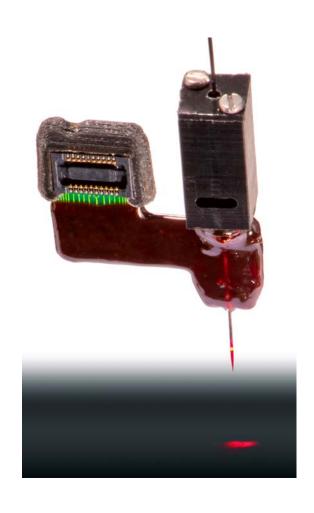
**NeuroNexus** introduces an "optoelectrode" which combines our high density recording with optical stimulation capabilities. We believe optogenetics is one of the most exciting, developing field and we are committed to providing unique product solutions for investigators in the field. We are offering our optoelectrodes in the acute and chronic packages.

Our optoelectrode packages feature a custom optical coupler: the NeuroNexus Coupler (NNC). This coupler has a low profile, low weight, and is ideal for behavior studies. It is the smallest coupler available and provides additional strain relief via an optical rotary joint. Our single shank Astyle probes can be mounted on the optoelectrode package (O-series).

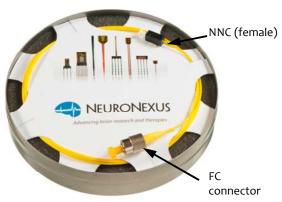
The O-Series probes interface with the light source via a patch cord. The probe end of NeuroNexus patch cords terminate with the NNC, and light source end terminates with either a LC, SMA, or FC/PC connector.

### **Optical Connector Options**





# **Optical Fiber Patch Cord**





## **Technical Specifications**

NeuroNexus Coupler	male 3 x 3 x 4.5 mm female 5 x 5 10 mm
Fiber	Fused silica, 105-μm core, multi-mode
Outer Diameter	125 μm (cladding)
Weight (coupler)	< 0.5 g
Transmission	> 80%
Durability	< 5% transmission variability after 40 connections
Rotation Test	< 2% variation during a single rotation
Connection Strength	> 300g before latch separation, typical
Maximum Shear Force	900g (applied to top of female coupler)
Fiber Location	Terminated at 200μm above most proximal site, unless specified Tolerance ±50μm
Artifact Amplitude	Varies from 2 $\mu$ V to 1 mV. Recommend artifact subtraction.
Reference Site	Not available in all O-series package

### **Acute Optoelectrode Package**

