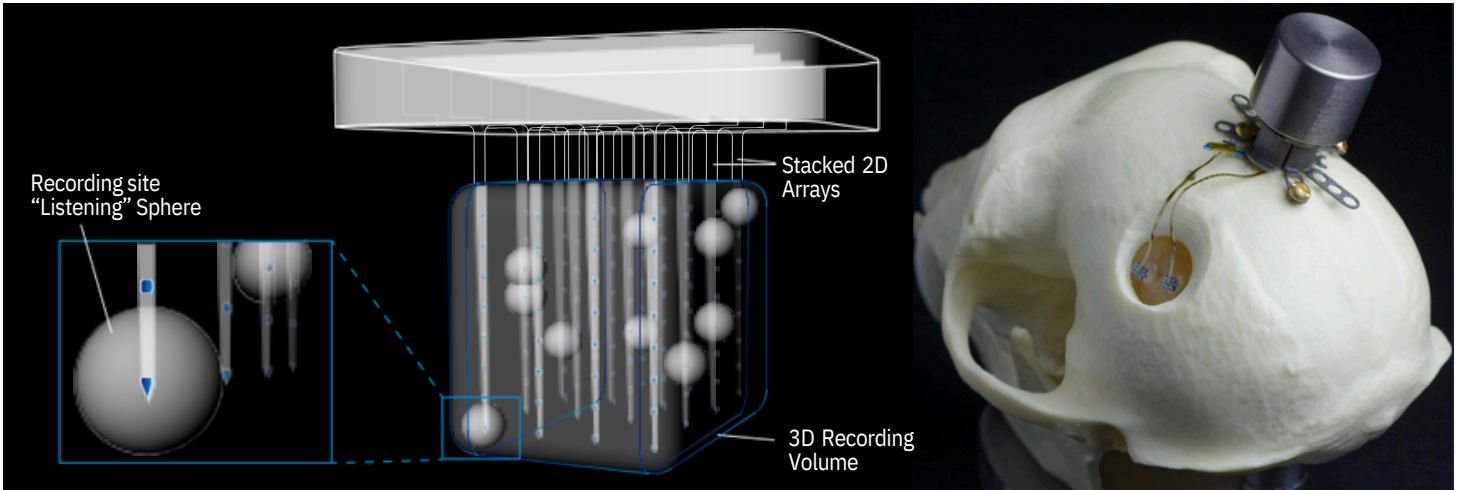


The Matrix Array™ is a versatile neural interface. It can be used in acute or chronic experiments for both small and large animals, interfacing with large populations of neurons in 3D space, up to 10 mm deep.



Advantages

- **3D Neural Interface** – The Matrix Array™ concurrently spans cortical columns and layers, interfacing with a volume of tissue and large populations of neurons.
- **Robust** – Lab-tested and refined to the smallest detail, the Matrix Array™ can withstand demanding chronic applications.
- **Versatile** – The modular assembly of the Matrix Array allows for varied configurations: record from cortical and/or subcortical areas, as well as from the brain surface, all with the same probe. Electrode length, site area, and shank/site spacing can all be customized for your application.
- **High Channel Density** – Record and stimulate from 64 to 256 channels.
- **Refined surgical procedure** – NeuroNexus worked closely with labs to develop a low-speed, low-risk, automated implantation procedure, reducing recovery time and preserving tissue health.
- **Optogenetics-compatible** – Configure a Matrix Array with an integrated optical fiber for novel optogenetics applications.



Primate

Small Animal

Channel Count	64, 128, 256
X-Axis (2D Array)	1800 µm max width
Y-Axis (2D Array) Spacing Options	200, 300, 400, 600, 800, 1000µm (specify when ordering)
Z-Span (Depth)	Up to 10 mm (varies by array design/selection)
Cable Length	30 mm, customizable up to 50 mm
Electrode Site Material	Iridium (standard), Platinum-Iridium (standard), Platinum (custom), Gold (custom)
Electrode Array Thickness	50 µm

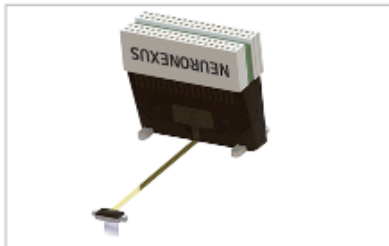
Channel Count	64, 128
X-Axis (2D Array)	1800 µm max width
Y-Axis Spacing Options (Slots - see channel count)	200 µm, 300 µm, 400 µm, 600 µm, 800 µm, 1000 µm (specify when ordering)
Z-Span (Depth)	Up to 10 mm (varies by array design/selection)
Cable Length	22 to 30 mm
Electrode Site Material	Iridium (standard), Platinum (custom), Gold (custom)
Electrode Array Thickness	50 µm

Matrix Packages

Small

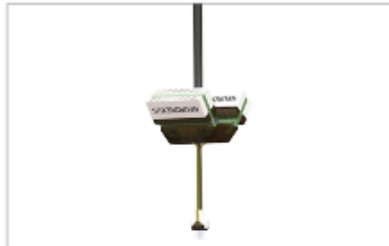


MCM64 on Rat Skull



MH64

Medium



MA128 (Acute Matrix Array)



MHS128

Large



MHS128-P



MAVH256-DP

Matrix Package Naming Key:

- CM = Cableless
- H = Cable
- S = Strengthened
- HD = Primate / Pedestal
- LP = Low Profile / No feet
- Dual = Dual Platform

Small Matrix Array Packages

MCM64	MA64
MCM128	MA128
MH64	
MH128	

Medium Matrix Array Packages

MHS64	MA64
MHS128	MA128

Large Matrix Array Packages

MHS128-P	MAVH128-SP
MHS128-KN	MAVH256-SP
MHS128-BSF	MAVH256DP