

# XDAQ CORE2

neuronexus.com



core is the entry model of Kontex's XDAQ line of multimodal electrophysiology tool. Record high-quality, high-bandwidth electrophysiology signals and deliver electrical stimuli in one device. Now includes out of box support for Neuropixels also!

#### **FEATURES**

- All new second-generation XDAQ hardware: upgraded high-speed, low-latency PC interface
- Out-of-box support for Neuropixels
- Supports KONTEX X-Headstages as well as all Intan-compatible headstages
- Low-cost, flexible HDMI cable
- Electrically isolated headstage ports for best signal quality
- Line out for real-time audio monitoring
- Triggered episodic recording
- in situ impedance measurement
- Upgradable functionality

## **Neuropixels Experiment**

2 ports.

Plug-and-play. No need for QBSC. Neuropixels 2.0, coming soon (free firmware upgrade).

### **Passive Probe Experiment**

#### Stimulation - 16 ch, 32 Ch

- Constant current, ±10nA to ±2.5mA output
- Flexible waveform: biphasic, triphasic, burst
- 33µs minimal time step
- Stimulation Compliance: ± 7V

### Recording - 512 Ch

In conjunction with X-Headstage:

- 16-bit ADC, ± 5mV input
- 2.4 µVrms Input-referred noise
- Hardware HPF: 100 20k Hz
- Hardware LPF: 0.1 500 Hz

Sampling rate: 1kS/s to 30kS/s per channel

#### **SOFTWARE**

Compatible with NeuroNexus Radiens Analytics suite. Full open source application support.

OpenEphys GUI or Intan RHX.

### **COMPUTER REQUIREMENT**

Modern PC with 6 core CPU and 16GB of RAM
One Thunderbolt 3 or above port





#### **POWER**

USB-C PD 60W (20V, 3A)

#### CONNECTIVITY

- 2 Ports for Neuropixels
- 4 HDMI Ports for passive probes:

128ch recording per port or one port for 32ch stim-rec

- 1 BNC Port for Digital IN
- 1 BNC Port for Digital OUT
- 1 BNC Port for Analog IN
- 1 BNC Port for Analog OUT
- 1 D-Sub25 Port for an additional 6 Digital IO
- 2 MicroHDMI Ports for IO Expansion
- 2 Thunderbolt ports for Data Transfer
- 1 USB PD Port for Power
- 1 Chasis/earth ground Port
- 1 System ground Port



#### **GENERAL PURPOSE IO**

	Onboard	Max*	Spec
Digital IN	7	31	Logic High: 2.2-5.5V Logic Low: 0V
Digital OUT	7	31	Logic High: 3.3 or 5V Logic Low: 0V
Analog IN	1	7	+/- 10V
Analog OUT	1	7	+/- 10V

<sup>\*</sup> requires XDAQ IO Expander