



ONE+ is the electrophysiology powerhouse: record high-quality, high-bandwidth electrophysiology signals, perform electrical stimulation experiment and drives up to 4 Neuropixels probes in one portable box.

FEATURES

- All new second-generation XDAQ hardware: upgraded high-speed, low-latency PC interface
- Out-of-box support for Neuropixels
- Supports KONTEK X-Headstages as well as all Intan-compatible headstages
- Electrically isolated headstage ports for best signal quality
- Three selectable stimulation compliance voltage options, deliver up to 40% more peak current
- Heavy-duty aluminum heatsink enclosure
- Line out for real-time audio monitoring
- Triggered episodic recording
- *in situ* impedance measurement

Neuropixels Support

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

Passive Probe Support

Recording - 512 ch, 1024 ch

In conjunction with X-Headstage:

- 16-bit ADC, $\pm 5\text{mV}$ input
- $2.4 \mu\text{Vrms}$ Input-referred noise
- Hardware HPF: 100 - 20k Hz
- Hardware LPF: 0.1 - 500 Hz

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

Stimulation - 64 ch, 128 ch

- Constant current, $\pm 10\text{nA}$ to $\pm 2.5\text{mA}$ output
- Flexible waveform, biphasic, triphasic, burst
- $33\mu\text{s}$ minimal time step
- Stimulation Compliance
 - $\pm 7\text{V}$
 - 10V to -4V
 - 4V to -10V

SOFTWARE

Compatible with NeuroNexus Radiens Analytics suite.
 Full open source application support.
 OpenEphys GUI or Intan RHX.



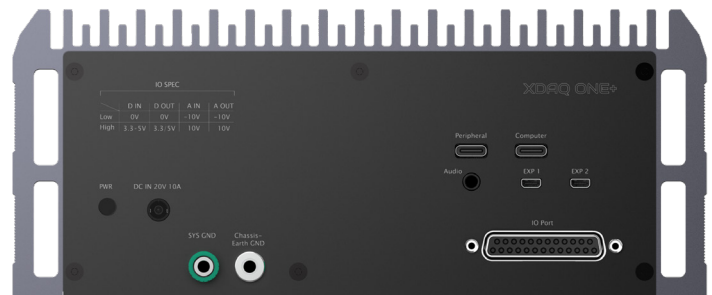
COMPUTER REQUIREMENT

Modern PC with 8 Core CPU and 32GB of RAM
 One Thunderbolt 3 or above port



CONNECTIVITY

- 2 Ports for Neuropixels
- 4 HDMI Ports for Electrophysiology (256ch recording or 32ch stim-rec per port)
- 2 BNC Port for Digital IN
- 2 BNC Port for Digital OUT
- 2 BNC Port for Analog IN
- 2 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 DC Jack Port for Power
- 1 Chasis/earth ground Port
- 1 System ground Port



GENERAL PURPOSE IO

	Onboard	Max*	Spec
Digital IN	8	32	Logic High: 2.2-5.5V Logic Low: 0V
Digital OUT	8	32	Logic High: 3.3 or 5V Logic Low: 0V
Analog IN	2	8	+/- 10V
Analog OUT	2	8	+/- 10V

* requires XDAQ IO Expander