

VOLTA Scanner

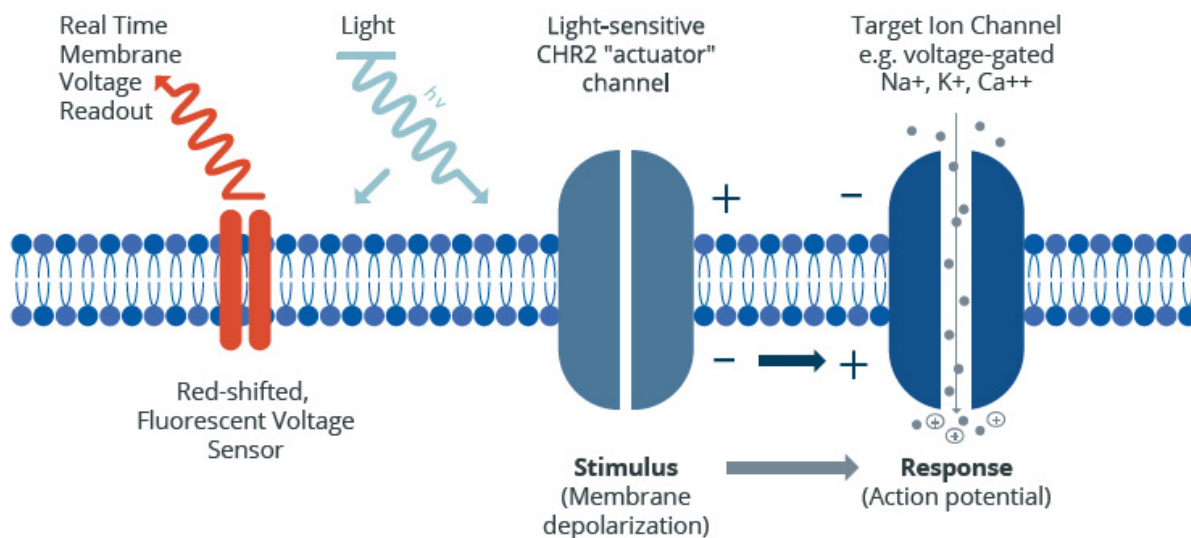
Automated, kinetic plate reader
for robust, high-throughput
cardiac electrophysiology analysis



VOLTA isn't just about capturing data—it's about capturing it precisely and swiftly.

Lumencor's [VOLTA Scanner](#) is a novel, automated kinetic plate reader for cardiac electrophysiology analysis. It is a robust optical alternative to traditionally noisy, challenging-to-perform patch clamp analyses.

VOLTA facilitates what is a notoriously cumbersome technique with optical transduction. This fluorescence solution includes hardware, software and a fluorescence probe for a turnkey solution. Seamlessly integrating scanning and analysis software, VOLTA ensures a streamlined, efficient workflow. Elevate your experiments with Lumencor's VOLTA Scanner – where innovation meets precision in high-throughput cardiac electrophysiology screening.

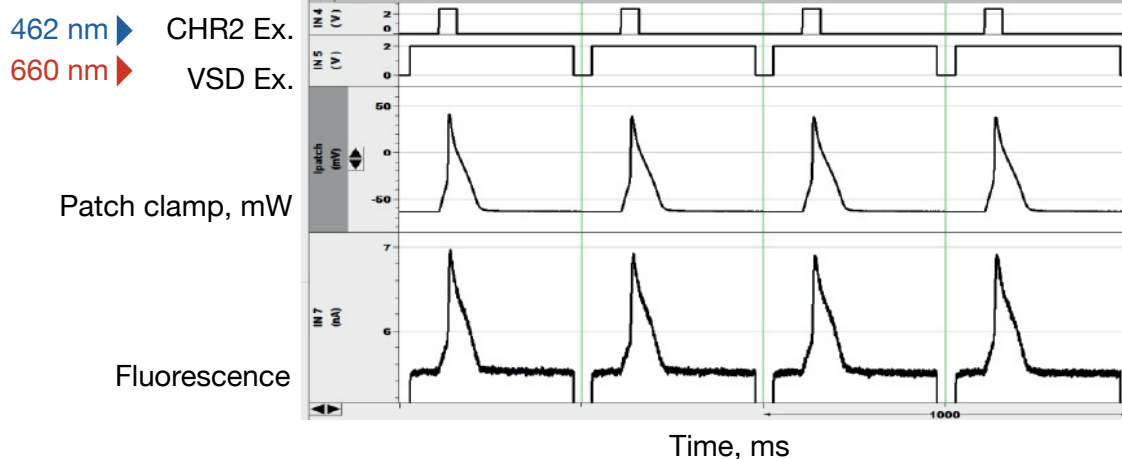


VOLTA boasts simultaneous scanning of 96 wells with best-in-class capture rates of 10 kHz. It offers the researcher unparalleled efficiency as VOLTA parallel processes each plate in less than 2 minutes with high resolution detection of changes in cardiac membrane potential.

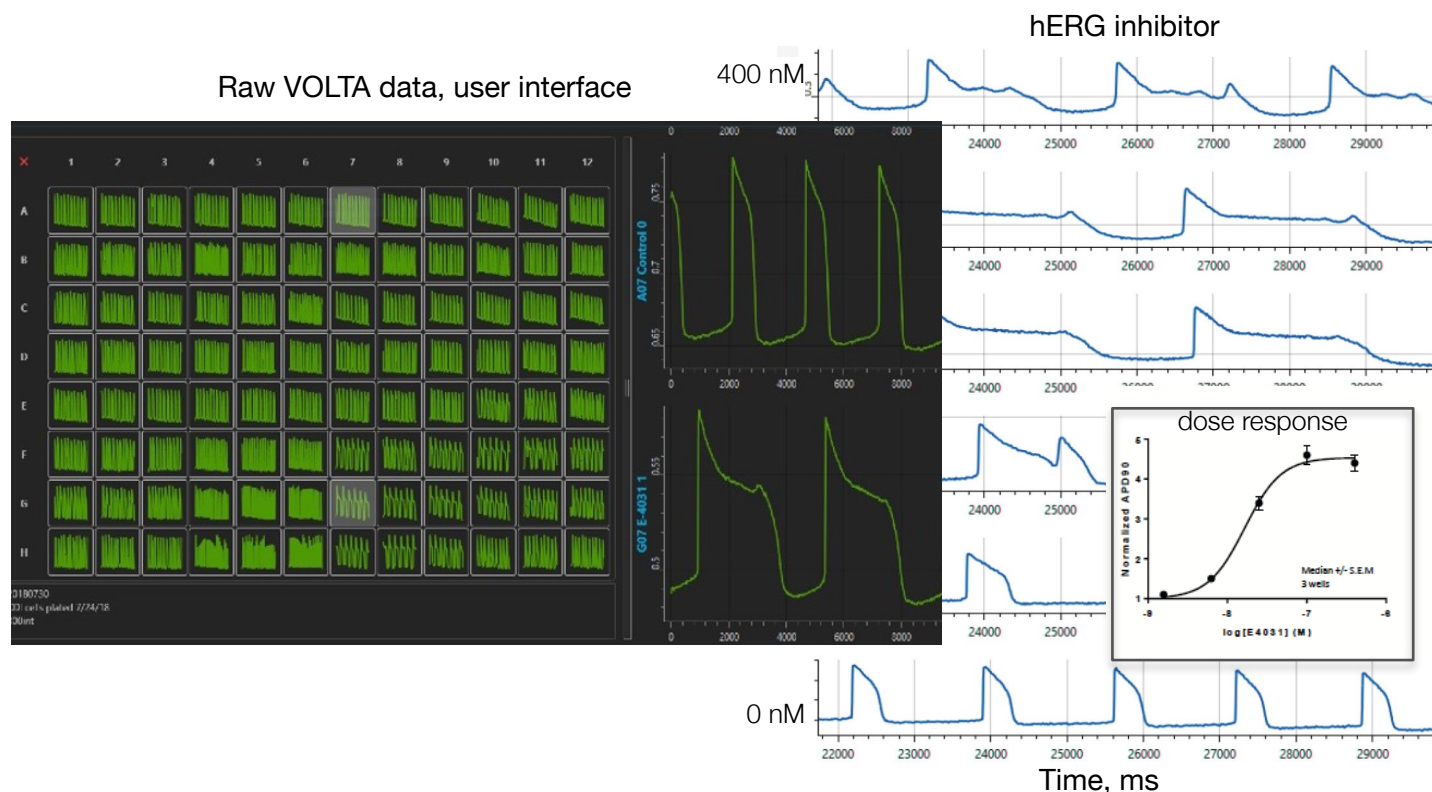
Key features:

- Optical, kinetic plate reader, 10 kHz sampling rate
- High-throughput via highly parallel analyses
- Effortless transmembrane ion-channel analyses
- User-friendly interface for seamless workflow
- Revolutionary optical alternative to patch clamp
- Unparalleled stability, robustness and reproducibility
- Unmatched value

Whether your assay implements simultaneously pulsing cells or depends on optically pulsed initiation (462 nm light), VOLTA guides and shapes light beams with unmatched precision. Each well receives targeted



illumination, ensuring no detail eludes interrogation. A 50-ms pulse of 462 nm light is absorbed by channelrhodopsin (ChR2), initiating a transient change in transmembrane voltage. Fluorescence detection excited by 660nm light is monitored via BeRST, a voltage-sensitive dye with 0.1 ms resolution.



VOLTA offers consistent, stable readouts in an elegant, user-friendly package. Its optical strategy employs hardware, software, and chemistry to elevate and facilitate high-throughput ion-channel assays. Fast kinetic data replaces laborious electronic studies. **Doesn't your ion-channel work deserve VOLTA?**



What do CUSTOMERS say about the FAST, STABLE, REPRODUCIBLE VOLTA?

“VOLTA is the workhorse of our pharmacology safety group for T-wave data.”

“VOLTA data led us to a strong publication.”

“Our group is making key decisions from data coming from VOLTA.”

“VOLTA quickly provides us reproducible, reliable data.”