Integrated Digitizer

- 40 kHz sampling rate
- 16-bit A/D (18-bit internal resolution)
- Stimulus voltage ranges: ±250 mV and ±2000 mV
- Zap voltage range of ±1000 mV

Feedback Gain Settings

- 10 MΩ, 100 MΩ, 1 GΩ, 3.3 GΩ, 10 GΩ

Low RMS Noise (DC to 3kHz)

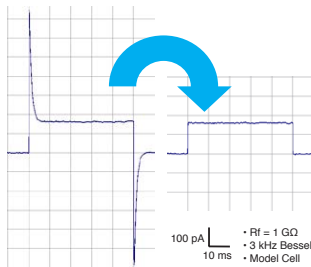- 0.3pA @ 10GΩ, 1.0pA @ 1GΩ, 7pA @ 100MΩ

Compensations

- Up to 4 Cap. Compensations Cfast x 1, Cslow x 3
- 0-100 pF per compensation
- Series Resistance Compensation Offset Compensation (±250 mV) Optional Active Leak Compensation

Current Clamp

- ±2 nA range with 1.25 pA res.
- ±20 nA range with 12.5 pA res.
- ±200 nA range with 125 pA res.

100 pA · Rf = 1 GΩ
10 ms · 3 kHz Bessel
· Model Cell

The patented Spread Frequency Compensation can automatically compensate any arbitrary capacitance profile in approximately 3 seconds.

The smallest patch clamp system available...

USB-powered Miniature Patch Clamp Amplifier and Digitizer

Full-featured 1-channel amplifier

Pico is a feature-rich, low-noise patch clamp amplifier with an integrated digitizer and headstage. Pico is ideally suited for whole cell (Vclamp and Iclamp) and single channel (patch, planar lipid bilayer and synthetic nanopore) recording, as well as cellular electrochemistry.

Voltage Clamp and Current Clamp

Clean Head Switching™ technology allows software-controlled switching between voltage clamp and current clamp, or between multiple feedback resistors, without introducing any artifacts. This enables one Pico to support a wide range of applications including whole cell, single channel, multi-cell, bilayers, electrochemistry, and current clamp.

Software

Compatible with: WinWCP by the University of Strathclyde. jClamp by SciSoft Company. TecellaLab software, with Data Export to ATF, tab-formats. SDK/API available. Other 3rd party software support.

Ordering Information

Part No.	Pico 2
Te-Pico 2	Pico 2 Mini electrophys. amp, BOB, and digitizer
Te-Trigger Cable	Optional cable to control external devices with WinWCP
Te-jClamp32	jClamp Pico Software academic license (call for non-acad)

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