NanoCycler

Easy, compact, and absolutely low-cost
battery charger-discharger
by NANO**BASE**

Higher performance instrument for battery researchers

Although many advanced battery research starts with coin cells, most researchers are forced to use standard battery cyclers designed for testing large cells such as 18650 cells. Responding to researchers' demand of more cost-effective battery cyclers, Nanobase, Inc. has launched NanoCycler, the higher performance battery cycler for research of coin cells. NanoCycler is easy and affordable for any battery researchers in chemistry, chemical engineering, electric engineering.

Features

Smooth
Place your 2025, 2032 coin cells directly into NanoCycler

Simple
Just connect NanoCycler to PC via USB port for analysis

Compact
Using in constant temperature chambers? No problem!

Expandable
Channel addition available for more than 80 channels per PC

Specifications

Product Size
153 × 270 × 107 (mm)

Electricity
- 88 ~ 264 VAC or 125 ~ 373 VDC
- 80 W (max)

Voltage
- Range: 0 ~ 5 V
- Accuracy: ±0.1% FS
- Measurement resolution: 16 bit
- Programming resolution: 14 bit

Current
- Range: 3 manually selectable ranges (200 μA, 2 mA, 20 mA)
- Accuracy: ±0.1% FS
- Measurement resolution: 16 bit
- Programming resolution: 14 bit
- Custom current range available

Channels
- 8 independent channels per unit
- Sockets for 2025, 2032 coin cells
- More than 80 channels per PC (depending on PC specifications and available USB ports)

Data Recording Rate
- 1 kHz (max)
- 0.001 s ~ 9999 s

Software
- Sequence editor : Step & loop sequence programming
- Channel monitor & control
- Channel summary
- Plotting function : general plot, cycle plot, real-time plot
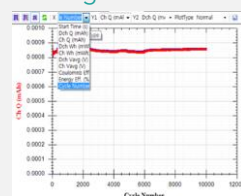- Data export in .csv format

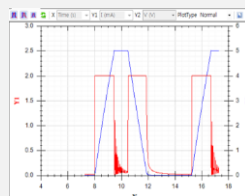## Software Capabilities

Channel control and monitoring

- Channel Start / Stop control with password protection
- Displays Cycle No., Step No., Elapsed Time, Current, Voltage, Q, Sequence File, and Data File

Sequence Editing

- Step types: Charge, Discharge, Standby, Loop
- Cut-off types: Voltage, Current, Step Time, Cycle Time, Capacity

Plotting

Cycle Plot

Real-Time Plot

Channel Summarizing

- Charge, Discharge, Standby/Error Status of all channels shown as icons
- Also displays Elapsed Time, Current, and Voltage