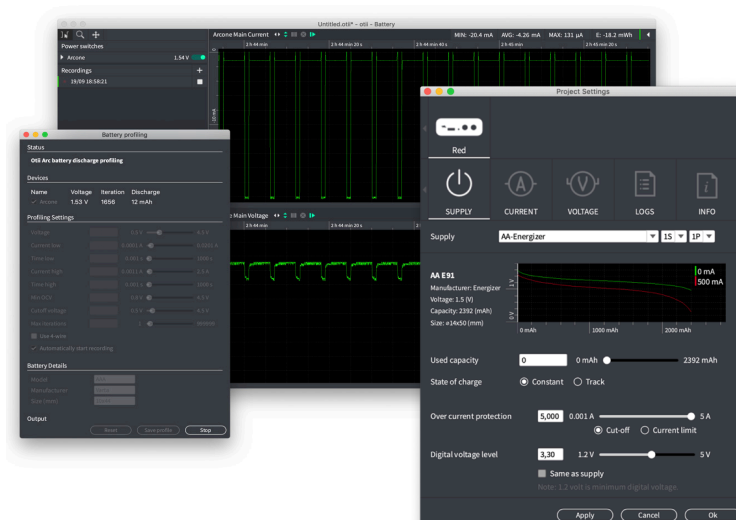# BT Otii Battery Toolbox

Product Specification

Otii Battery Toolbox elevates your Otii Standard to a comprehensive battery profiler and emulator. By enabling the toolbox, the DC power supply feature of Otii Standard is extended with battery emulation from prerecorded, in-app, realistic battery profiles or even better, your own, profiled with Otii.

The set of features are thoughtfully curated to give flexibility in profiling for different applications and replaying it on the device under test. The combination of portable Otii Arc and Otii Battery toolbox opens for possibilities of profiling and evaluation of batteries beyond developer´s desk, in realistic use environments. Otii Battery Toolbox enables benchmarking and insights into fit between the intended battery, the device under test and the application in mind.

Otii Battery Toolbox requires Otii Arc hardware and is an annual software license.

Key features

- Easy to use and intuitive UI for battery profiling and emulation
- Create, edit and share battery models
- Build a library of battery models using Otii as a model generator
- Pick from a library of growing number of battery discharge profiles (in-app and Qoitech Github)
- Display the real-time battery voltage and used capacity for the emulated battery
- Get a table of the battery Open Circuit Voltage (Voc), Equivalent Series Resistance (ESR) and available capacity.
- Program the battery state of charge (SoC), Voc, capacity, and ESR
- Emulate at constant capacity
- Emulate battery at different levels of used capacity
- Monitor discharge current and voltage
- Profile/emulate serial and parallel battery set-ups
- See, at what battery capacity, device under test cut-off voltage is achieved
- Output up to 25 W of low noise, linear regulated power
- Monitor load currents from 50nA to 5 A with high accuracy up to 0.1%
- Sink current up to 2.5 A and source current up to 5 A

Battery Model Parameters (using Otii Arc)	
Points in Emulation	as many as no of iterations
ESR Range [1]	up to 5 kohm
ESR Resolution	down to 1 mohm
V_{OC} Range	0 to 5 V
V_{OC} Resolution	1 mV
Capacity Range	no limit
Capacity Resolution	1 µAh

[1] Otii Battery Toolbox emulates the total ESR

QOITECH

Qoitech AB is a Swedish company bringing to market the most effective developer tools for visualisation, measurement and analysis of energy consumption of battery driven products. By enabling ease of use, our toolboxes help developers, throughout the stack, to develop for longer battery life, shorter development time and increased product quality.

Learn more at www.qoitech.com.