

# Series 2300 Portable Device Battery/Charger Simulators

30-SECOND SELL

“Test a portable, battery-operated device under realistic conditions with a battery simulator that emulates a battery’s output characteristics. **Measure power consumption of any portable device** including wireless devices. Use two channels either to test two devices simultaneously or to test a device’s charger circuitry.”

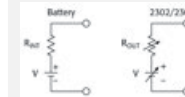


### PRODUCT HIGHLIGHTS

- Optimized for battery-powered device testing
- 100nA current measurement sensitivity
- Load pulse current measurement: 33µs - 833µs
- Variable output resistance: 0 - 1Ω with 10mΩ resolution
- Measure sleep, currents, standby currents, and full load currents to determine power consumption
- Sink current to simulate a discharged battery



Model 2306 Rear Panel.



Simplified schematic of a battery and the 2302/2306.

MODEL	STOCK CODE	CHANNELS	MAX OUTPUT VOLTAGE / CURRENT	POWER	TRANSIENT RESPONSE TO A 10X LOAD CURRENT CHANGE	CURRENT SINK CAPACITY
2302, 2302-PJ	NIC	1	15 V / 5 A	42W	<40µs recovery time and <75mV voltage drop	3A
2306, 2306-PJ	2131308	2	15 V / 5 A	45W	<40µs recovery time and <75 mV voltage drop	3A
2306-VS	NIC	2	15 V / 5 A	45W	<40µs recovery time and <75 mV voltage drop	3A
2308	2131309	2	15 V / 5 A	45W	<35µs recovery time and <90 mV voltage drop	3A

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## RECOMMENDED ACCESSORIES

2306-DISP	Remote Display (2302, 2306, 2308)
CS-846	Mating Output Connector
SC-182	Low Inductance Coaxial Cable
4288-1	Single Fixed Rack Mount Kit
4288-2	Dual Fixed Rack Mount Kit
KPCI-488LPA	IEEE-488 Interface Board for PCI Bus
KUSB-488B	IEEE-488 USB-to-GPIB Interface Adapter
7007-05	Double Shielded IEEE-488 Cable, 0.5m (1.6ft)
7007-1	Double Shielded IEEE-488 Cable, 1m (3.2 ft)
7007-2	Double Shielded IEEE-488 Cable, 2m (6.5 ft)
7007-3	Double Shielded IEEE-488 Cable, 3m (10 ft)
7007-4	Double Shielded IEEE-488 Cable, 4m (13 ft)

## RECOMMENDED SERVICE

Model Number*-3Y-EW	1-year factory warranty extended to 3 years from date of shipment
Model Number*-PJ-3Y-EW	1-year factory warranty extended to 3 years from date of shipment

\* Insert Model Number. Example: 2302-3Y-EW.

## SHIPS WITH PRODUCT

- User Documentation
- Rear Panel Mating Connector
- Calibration Certificate
- Power Cord
- 1-year Warranty


## ANOTHER PRODUCT FOR CONSIDERATION



If more power is needed, consider the **Model 2304A**, which can output 100W (20V @ 5A).

**See page 142**

## TOOLS FOR THE CUSTOMER

 Data Sheet

FOR MORE INFO VISIT  
[TEK.COM/DC-POWER-SUPPLY/SERIES-2300-BATTERY-SIMULATING-DC-POWER-SUPPLIES](http://TEK.COM/DC-POWER-SUPPLY/SERIES-2300-BATTERY-SIMULATING-DC-POWER-SUPPLIES)

## 3 Reasons to Buy this Product

- 1 Test engineers can use these power supplies to simulate a battery's output for testing devices under realistic operating conditions by simulating the internal resistance of a battery with the supply's programmable output resistance.
- 2 Measure total power consumption of portable devices, even if the load current is pulsed, with 33 $\mu$ s measurement speed and 0.1 $\mu$ A current sensitivity.
- 3 Test a portable device's charger circuit using one power supply channel to sink current and act like a discharged battery and using the second channel to act like a charger.