



# Simulate battery cells with this flexible, high-precision generator.

- Consolidates 12 power supplies, electronic loads, and DMMs into a single unit.
- Delivers world-class voltage output precision and voltage/current measurement precision.
- Provides safe, simple battery cell simulation functionality.
- Provides simulation and control functionality via an included computer application.
- Delivers peace of mind thanks to reliable support from providers of international standard-compliant calibration services.



## Specifications (Accuracy guaranteed for 1 year)

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Number of channels	12	
Maximum in-series connections	In-series connections of instrument up to and including a maximum in-series output voltage of 1000 V	
Output range	DC voltage	0.0000 V to 5.0250 V (set independently for all channels)
	Maximum output current	±1.00000 A (set independently for all channels) Continuous output: -210 mA to 210 mA Continuous output of currents greater than 210 mA or less than -210 mA is subject to limitations*. *Continuous output limitations Max. output time: 200 ms Time to next output (reference value): If outputting 1 A at 5 V for 200 ms, 5 s
Measurement range	DC voltage	-0.00100 V to 5.10000 V
	DC current (2-range archi- tecture)	±1.20000 A (1 A range) ±120.0000 μA (100 μA range)
Integration time	1 PLC (50 Hz: 20 ms; 60 Hz: 16.7 ms) × number of smoothing iterations (user-configured)	
Voltage output accuracy	±0.0150% of setting ±500 μV	
Voltage measure- ment accuracy	±0.0100% of reading ±100 μV	
Current measure- ment accuracy	1 A range	±0.0700% of reading ±100 μA
	100 μA range	±0.0350% of reading ±10 nA
Accuracy guarantee temperature and humidity range	23°C ±5°C, 80% RH (with warm-up time of at least 30 min.)	
Power supply	Universal (100 V to 240 V AC)	

Power supply frequency range	50 Hz / 60 Hz, ±2 Hz
Interfaces	LAN Communication: Setting by communication commands, acquisition of device status, acquisition of measurement values
Dimensions	430W×132H×483D mm (16.93"×5.20"×19.02")
Weight	10.3 kg (363.3 oz.)
Accessories	User manual, power cord, rack frame, disk with computer application

#### Included computer application

	Item	Description
Control	Voltage generation	·ON / OFF / Save settings / Load settings
	Voltage/current measure- ment	·Current range switching ·Measured value logging (CSV file output)
	Sequence	·Edit CSV file / Load file ·Step execute / Continuous execute / Stop
	Graph display	·Waveform display of measured values ·Save screenshot (save image file)
Simula- tion	Charge/discharge simulation	·Configure linear interpolation method     ·Configure curve-fitting method     ·Perform charge/discharge simulation     ·Automatically vary charge/discharge current values
	Transient response simulation based on equivalent circuit parameters	·Configure equivalent circuit parameters ·Perform transient response simulation

Operating environment: Windows 7 Service Pack 1 or later (except Windows 8) Resolution: 1920 × 1080 (full HD) or better

### Model



## Model: BATTERY CELL VOLTAGE GENERATOR SS7081-50

Model No. (Order Code): SS7081-50

Please contact your HIOKI distributor for a demonstration unit and further specifications.

## **Related Products**



MEMORY HICORDER MR8740T



DIGITAL VOLTMETER UNIT U8991



VIR GENERATOR UNIT U8794

The combination of the MEMORY HiCORDER MR8740T and a dedicated unit can be used to build a temperature simulation test environment embedded in HILS.



FLYING PROBE TESTER FA1240



IN-CIRCUIT TESTER FA1220



FA1220-02

In combination with the In-Circuit Tester series used for intermediate process inspection, mass production inspection of BMS boards is possible (final process yield improvement).

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#### **HEADQUARTERS**

81 Koizumi. Ueda, Nagano 386-1192 Japan https://www.hioki.com/



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