

The IT2600 series is a 1U, high-accuracy, multi-channel cell simulation and test platform integrating eight mutually isolated cell channels. Each channel supports independent voltage, current and internal-resistance settings. Built-in battery models cover high-order models, internal-resistance models, battery-curve simulation, fault simulation, and active/passive balancing tests.

Multiple units can be series-connected for systems with more than 200 channels and safe stacking up to 1200 VDC. The platform also provides DC+AC sine-wave ripple superimposition, open/short/reverse-polarity fault simulation, and integrated oscilloscope, data logging, list programming, digital I/O, and CAN/LAN/USB interfaces for fast ATE and HIL integration.

Compared with conventional cell simulators, the IT2600 adds basic charge/discharge testing, including CC/CV operation, cycling, capacity and energy statistics, and flexible cut-off conditions. It supports BMS/CMU R&D, ATE production testing, HIL integration, balancing verification, quiescent-current analysis, and basic cell performance validation.



- Built-in Li-ion, NiMH, NiCd and other battery models
- 1st- to 5th-order battery models and internal-resistance models
- Custom SOC-VOC-RES relationships; CSV import/export
- Voltage accuracy up to 1 mV
- Series expansion to more than 200 channels
- Voltage ripple as low as 0.5mVrms
- 1-1000Hz DC+AC sinewave ripple simulation, up to 100mVpp
- Optional ITS5800 BMS test system synchronously simulates cell voltage, temperature sensors, insulation status, pre-charge and communications
- 100nA-level current measurement accuracy
- Charge, discharge and cycle testing
- Capacity and energy statistics
- Cut-off conditions by voltage, current, time, capacity, energy or cycle count
- With IT9320 software: advanced data analysis and report generation
- Active/passive balancing tests
- Fault simulation: open circuit, short circuit and reverse polarity
- Seven configurable digital I/O ports
- Oscilloscope: 100kHz, 600kpts voltage/current digitization

- Data logger: measurement interval down to 20us
- List programming up to 2,000 steps
- Free PV2600 PC software for 100+ channel control and ATE integration
- Standard CAN/LAN/USB; HIL ready
- SCPI, CANopen and Modbus support
- OVP/UVP/OCP/OTP and reverse-polarity protection indication

Parameter		Model: IT2606-06-01	
Rated Range	Voltage	0~6V	
	Current	0~±1A	
	Power	0~6W	
	internal resistance	0~1Ω	
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%F.S.+0.1mV	
	Current	≤0.01%F.S.+200uA	
Load Regulation ±(% of Output+Offset)	Voltage ^{*1}	≤0.01%F.S.+1mV	
	Current	≤0.01%F.S.+200uA	
Setting Resolution	Voltage	6V range	0.1mV
	Current	1A range	0.1mA
	internal resistance	6V range	1mΩ
Readback Resolution	Voltage	6V range	0.1mV
	Current	1A range	0.1mA
		100mA range	10uA
		100uA range	10nA
Setting Accuracy	Voltage	6V range	≤0.01% + 0.01%F.S.
	Current	1A range	≤0.05% + 0.05%F.S.
	internal resistance	6V range	≤0.1% + 0.2%F.S.
Readback Accuracy	Voltage	6V range	≤0.01% + 0.01%F.S.
	Current	1A range	≤0.05% + 0.05%F.S.
		100mA range	≤0.05% + 0.05%F.S.
		100uA range	≤0.05% + 0.05%F.S.
Ripple (20hz-20Mhz)	Vpeak	≤5mV	
Ripple (20hz-10Mhz)	Vrms	≤0.5mV	
Setup Temperature Coefficient (% of Output+Offset)/°C	Voltage	≤20PPM/°C	
	Current	≤20PPM/°C	
Readback Temperature Coefficient (% of Output+Offset)/°C	Voltage	≤20PPM/°C	
	Current	≤20PPM/°C	
Rise Time(no load) *2	Voltage	≤40us	
Rise Time(full load) *2	Voltage	≤40us	

Fall Time(no load) *2	Voltage	≤40us
Fall Time(full load) *2	Voltage	≤40us
Transient Response Time *3 50%-100% load change	Voltage	≤30us
AC Input	Voltage	100V~240V
	Frequency	50/60Hz
Sense Compensation Voltage		≤1V
Programming Response Time		1ms
Power Factor		0.95
Max. input current		2.5A
Max. Input Apparent Power		250VA
Storage Temperature		-10℃~70℃
Protection		OVP/OC/OTP/UVP/SENSE
Standard Interface		CAN/USB/LAN
Withstand Voltage (Output to Ground)		1200VDC
Withstand Voltage (Between Channels)		500VDC
Withstand Voltage (Input to Ground)		2100VDC
Withstand Voltage (Input to Output)		4200VDC
Working Temperature		0~40℃
Fuse		10A
Series Number		≤200 pcs
IP		IP20
Safety		IEC 61010
Cooling		Air
Bare Unit Dimensions (mm) W*D*H		600mm*437mm*43.5mm
Overall dimension (mm) W*D*H		646.5mm*459mm*57mm
Weight (net)		(11±0.5) kg

Note: *1 Under sense mode

*2 Voltage rise time from 10% to 90% of rated voltage and voltage fall time from 90% to 10% of rated voltage

*3 Restore to within the stable value of 30mV

This specification is for reference only and is subject to change without notice.