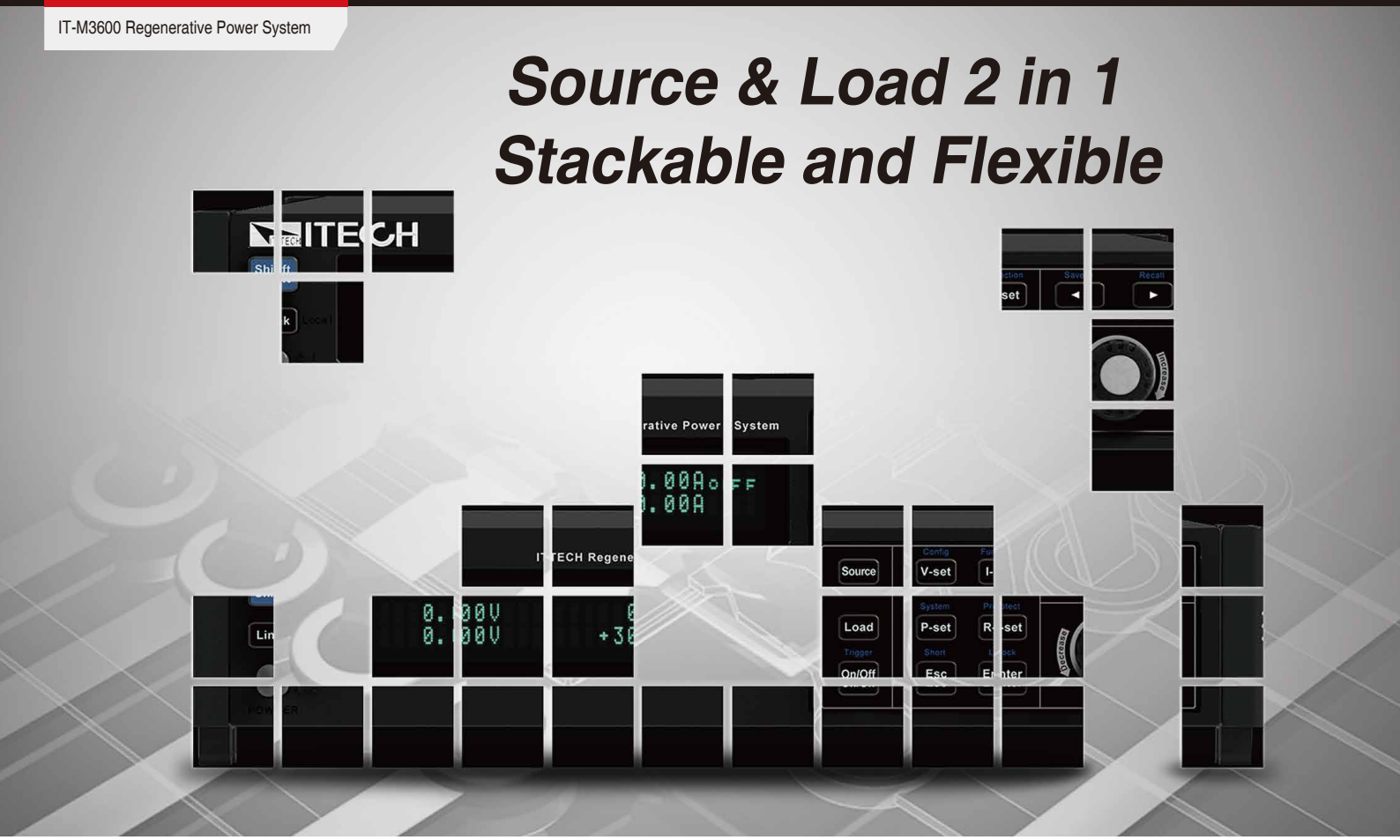
ITECH

YOUR POWER TESTING SOLUTION

Product

IT-M3600 Regenerative Power System



IT-M3600 Regenerative Power System

APPLICATIONS

- Battery charge/discharge test
- Power supply module test
- PV inverter test
- Aging test of semi-conductor/IC
- Battery simulator

Your Power Testing Solution

One button switch between source and load

Highly efficient power regeneration

Battery simulation and test

PV inverter I-V curve simulation

IT-M3600 regenerative power system integrates two instruments in one device, composed by a bidirectional power supply and a regenerative electronic load. When being used as a load, its energy recovery function can convert the absorbed DC power into AC power and return it to the local grid. When being used as a power supply, it is a wide range bidirectional DC power supply. Its ½U size and 256-channel sync control boost testing efficiency and flexibility, saving space and costs for end users, esp. production line customers. IT-M3600, with high-precision output and measurement, it is suitable for multiple test fields such as multi-module batteries, multi-channel power supplies, micro inverters, and semiconductor devices.

FEATURE

- 1U half rack, high power density
- One button switch between source and load
- Bidirectional energy flow between DUT and grid
- Utilizes third-generation SiC power devices for efficient energy recovery
- Battery test
- Battery simulation
- 8 operating modes: CC/CV/CP/CR/CV+CC/CC+CR/CV+CR/CV+CC+CP+CR*1
- Supports synchronous control of up to 256 channels, implement synchronization or proportional tracking
- PV inverter I-V curve simulation
- High-speed measurement, keep 10 times / s update rate even connecting 16 stand-alone units
- CC/CV priority
- Adjustable output impedance
- Programmable rise/fall time for voltage and current*2
- Temperature measurement function, over temperature protection
- List
- Various protection such as OCP, UCP, OVP, OTP, OPP, UVP, over heat protection, grid fault protection and fault storage, foldback, Power-off protection, sense abnormal protection
- Automatic detection of power grid state to realize reliable grid connection
- Precharge function to prevent overshoot of DC loading current
- Anti-reverse protection function through optional accessories
- Five optional cards, supporting RS232, CAN, LAN, GPIB, USB_TMC, USB_VCP, RS485, analog and IO

*1 Multiple operation modes is only available under load function
*2 Only current rise and fall time can be set under load function

Model	Voltage	Current	Power	Model	Voltage	Current	Power
IT-M3612	60V	30A	200W	IT-M3614	300V	6A	200W
IT-M3622	60V	30A	400W	IT-M3624	300V	6A	400W
IT-M3632	60V	30A	800W	IT-M3634	300V	6A	800W
IT-M3613	150V	12A	200W	IT-M3615	600V	3A	200W
IT-M3623	150V	12A	400W	IT-M3625	600V	3A	400W
IT-M3633	150V	12A	800W	IT-M3635	600V	3A	800W

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IT-M3600 Regenerative Power System

Applications

- Various small capacity battery charge and discharge tests

  Electric bicycles, balance bikes, drone batteries, sweeping robot batteries, etc

- Battery simulator, simulate the IV curve of different characteristics battery

  Servo motor test, unmanned electromechanical test, smart meter test, etc.

- Low Power Module Test

  Bidirectional DC-DC module test, small inverter module test

- Semiconductor IC, relay, wiring harness and other aging test

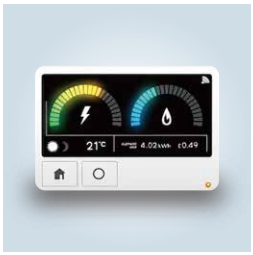
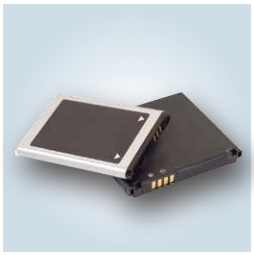
  Power regulator, intelligent electronic switch IPS, auto central control box aging test

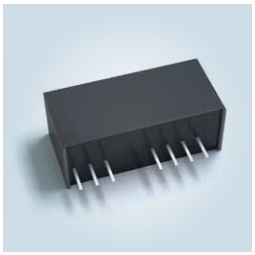
- Test in photovoltaic field, simulate IV curve of small photovoltaic array

  Micro inverter, photovoltaic IC test, photovoltaic optimizer test








One button switch between source and load

IT-M3600 integrates two devices in a small size of 1U Half-rack, which can not only be operated as a high-performance bidirectional DC power supply; but also be operated as a regenerative e-load. Simulate various load characteristics and feedback power to grid without pollution, multi-functions in one. Users do not need to use software and any terminal equipment to switch operation mode, one button switching can greatly save time and space.

1U Half-rack

IT-M3600 is only 1U Half-rack, but the power output is up to 800W. Besides high power density, it also has high resolution, high accuracy and high stability, etc. The output voltage is up to 600V and the output current is up to 30A. All series containing 12 models with ultra-wide range output design, can be widely used in various Applications.

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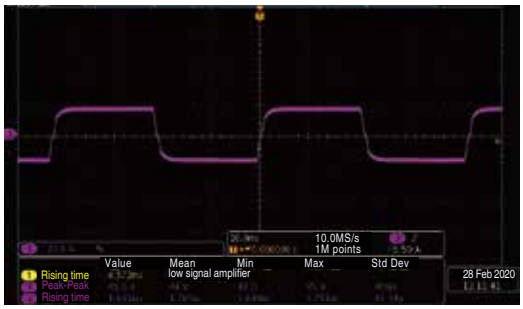
IT-M3600 Regenerative Power System

Seamless switching between source and load

Different from the traditional power supply and load, the switch between positive and negative current, it will have transient jumps and discontinuities. IT-M3600 integrate bidirectional power supply and regenerative load in one unit. When work under source mode, it supports high speed switch between source and sink mode, such seamless switch between positive and negative current is fast, continuous, and seamless, so as to avoid the current or voltage overshoot during the test. This can be widely used to various tests related to storage unit such as battery, battery packaging, battery protection board etc.

* only available for single unit



Seamless charging and discharging switch under CC priority

High energy regeneration efficiency

With the power regeneration function, IT-M3600 can feed back up to 90% power instead of consuming it as heat. It not only save your cost of electricity, HVAC and cooling infrastructure, but also help to reduce carbon emission and impact on the environment.

Production facility : 24Hr/day x 7 work days x 52 weeks

Power	electricity cost saved (appr. USD/year)	CO_2 emission reduced (appr. ton/year)
200W	220	1568
400W	440	3136
800W	881	6271

R&D lab : 8Hr/day x 5 work days x 52 weeks

Power	electricity cost saved (appr. USD/year)	CO_2 emission reduced (appr. ton/year)
200W	52	373
400W	105	747
800W	210	1493

1. approximate electricity price 0.14USD/ kWh for industry facility in California
2. 1 kWh power consumption ≈ 0.997 CO_2 emission

* The extra cost of air conditioning is not included.

Battery simulation function

IT-M3600 support to simulate max. 99 cells in series and parallel connection. The users can quickly select battery matrix by setting battery voltage, capacity, resistance, SOC from the front panel.

ITECH provides optional BSS2000 battery simulation software, users can self-define the battery curve by setting common parameters, also can set battery initial capacity to verify the DUT characteristics under different battery status. Meanwhile, BSS2000 supports to import matlab battery matrix or CSV. file with battery charging and discharging curve, so as to simulate real battery charge and discharge characteristics.

*Please contact ITECH for details.

BSS2000 battery simulation software interface

Solar panel I-V curve simulation

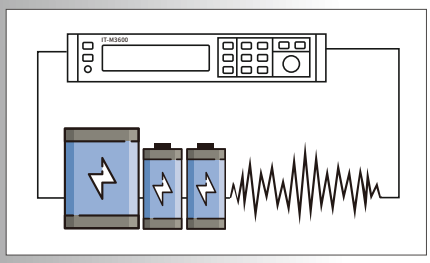
IT-M3600 configured with optional ITECH SAS1000 Solar Array Simulation Software, users can accurately simulate the I-V curve. Built-in EN50530、Sandia、NB/T32004、CGC/GF004、CGC/GF035 standard testing procedures, it is convenient for users to test the static and dynamic MPPT performance of PV inverters and generate reports. Solar simulation power supply also provides the shadow and table mode operation, the user can enter up to 1024 points array to edit any shielded IV curve to achieve dynamic shadow effect simulation and also can store 100 I-V curves under different irradiation and temperature to test the long-term maximum power tracking performance of photovoltaic inverters under different climatic conditions.

Battery Test Function

IT-M3600 series Regenerative Power System, which integrates power supply and regenerative electronic load into one unit, and adjustable output impedance design, can simulate the charging and discharging characteristics of the battery, and perform other testing, too. It can be used not only test the multiple single cells, but also comprehensive test the battery packages. It can also perform the battery setting and data processing in various test conditions and plot the test figure.

Optional ITS5300 professional battery test software can perform the following test items:

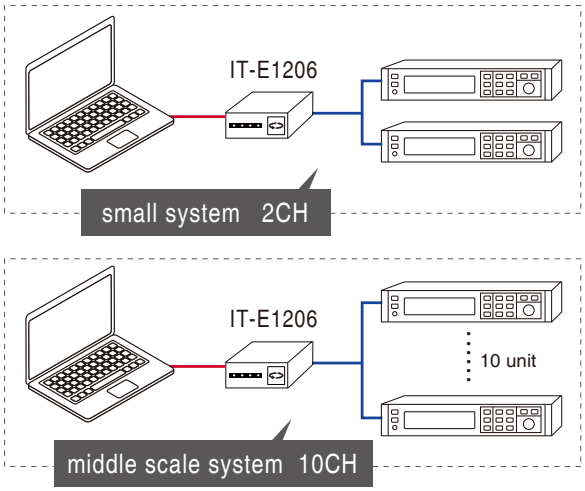
- working condition simulation
- Battery DC IR Test
- Battery endurance test
- Battery Temperture Test
- Reliabilty Test
- Charge and Discharge characteristic
- Battery cycle life test
- Battery capacity test
- Over charge and Over discharge endurance test
- Battery conformity test

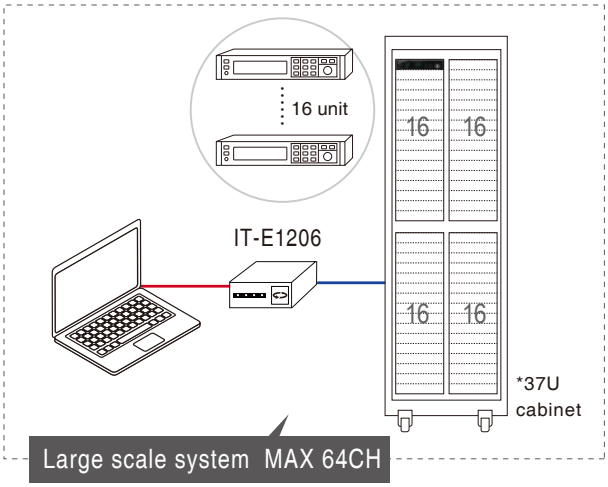


Multi-channel independent control,maximum 256 channels

IT-M3600 Series is provided with independent multi-channel design.The channel sequence will be displayed when it combines to be a multi-channel power and electronic load system.The user can control each unit independently by PC software when connecting the communication interface of one unit with PC.Each channel can be operated separately .

IT-M3600 Series supports maximum 16*16 channels. One 37U rack case contains 64 channels.





Multiple Protection function

IT-M3600 series have comprehensive protection functions, it can also provide OCP, UCP, OVP, OTP, OPP, UCP and grid fault protection, fault storage function, power-off protection function and sense sensing abnormal protection. With unique foldback protection function designing, it is used to turn off the output as soon as the power supply is switched by CV/ CC for protect the DUT which are sensitive to voltage overshoot and current overshoot. As it can automatic detect of power grid status, the product will be shut down when the power grid is suddenly disconnected, which can achieve reliable grid connection and islanding protection. The pre-charging function can prevent the DC load current from overshooting. Users can choose the anti-reverse connection module to achieve the anti-reverse protection function and effectively suppress the battery surge.

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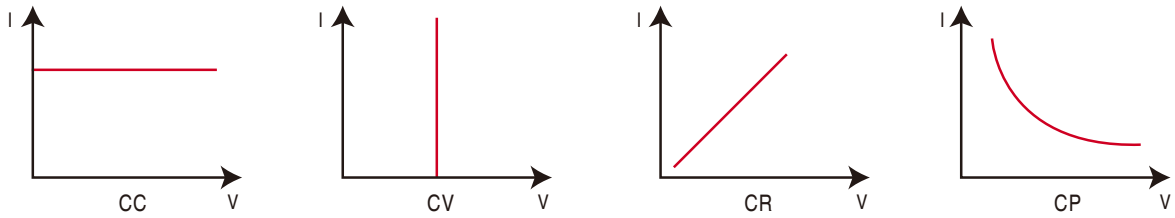
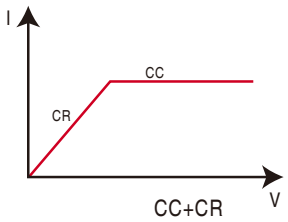
Multiple operation modes

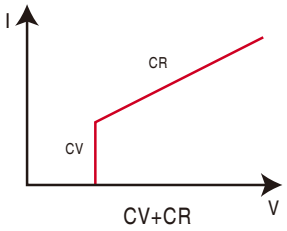
IT-M3600 provide CC/CV/CP/CR basic operation modes based on power system mode.



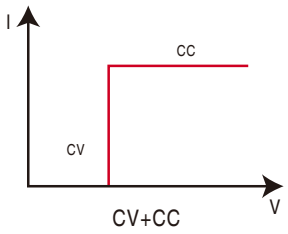
IT-M3600 also provide CC+CR/CV+CR/CV+CC/CC+CV+CP+CR four complex operation modes based on load mode, which can adapt to the test requirments of various occasions.



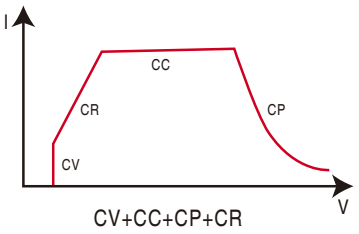
CC+CR mode can be applied to OBC feature test of voltage limit,feature test of current limit,constant voltage accuracy test,constant current accuracy test, to prevent over current protection.



CV+CR mode can be applied to simulate LED light, test LED power , LED current ripple parameters.



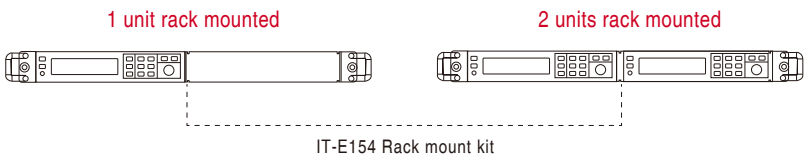
CV+CC mode can be applied to load simulate battery, test charging station or car charger, the maximum loading current is limited,when the CV is working.



CV+CC+CP+CR mode can be applied to test lithium-ion battery charger, to gain complete V-I charging curve.In addition,when protection circuit of DUT is damaged, it can auto switch to aviod damage.

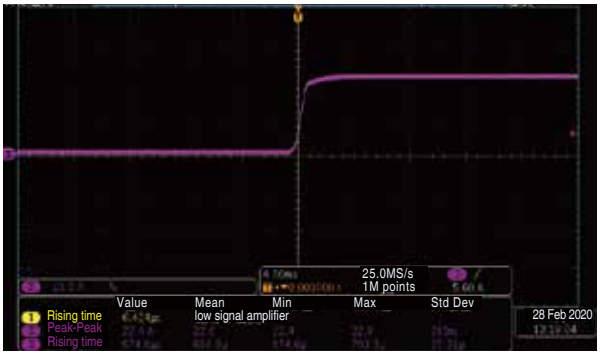
Modular design, flexible combination

The flexible modular design makes it simple for IT-M3600 to stack directly, no need to purchase any accessories. The user may use IT-E154 optional rack mount kit to install one unit or more units into 19” rack case.

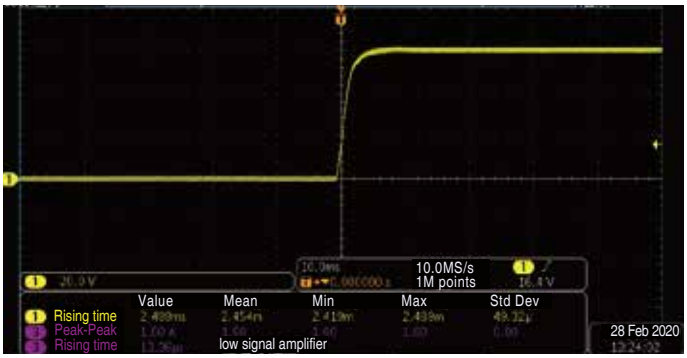


CC&CV priority

IT3600 series continue the notion of CC&CV priority, help user to solve several critical problems with long-term testing.It can make the test easier especially for the applications like hign speed power supply or no overshooting current. when need the testing occasions of voltage high speed, users can choose CV priority mode to get fast voltage rising time. Users can also choose CC priority mode to output no overshooting current,it's good for test DUT under CC working condition.This is used in various applications field such as laser test, IC test, charge and discharge test, transient simulation of power supply in automative electronics and so on.



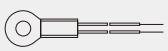
CC priority



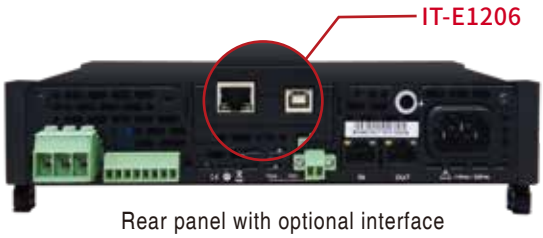
CV priority

Optional accessories

IT-M3600 series provides below optional multiple interfaces on rear panel to realize different functions, like communication interface, external analog interface.

Pictures	Model	Interface
	IT-E1205	GPIB
	IT-E1206	USB/LAN
	IT-E1207	RS–232/CAN
	IT-E1208	Analog
	IT-E1209	USB
	IT-E118	Anti-reverse module
	IT-E1203	Temperature Sensor
	IT-E154A/B/C	Rack mount kit

Standard rear panel



Rear panel with optional interface

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IT-M3600 Regenerative Power System

Specification

		IT-M3612	IT-M3613	IT-M3614
Load Parameters				
Rated Value (0 ℃-40 ℃)	Input Voltage	0~60V	0~150V	0~300V
	Input Current	0~30A	0~12A	0~6A
	Input Power	0~200W	0~200W	0~200W
	MOV	0.6V at 30A	1.5V at 12A	3V at 6A
Input Current Readback	Resolution	10mA	1mA	1mA
	Accuracy	<0.1%+0.1%FS	<0.1%+0.1%FS	<0.1%+0.1%FS
Input Voltage Readback	Resolution	1mV	10mV	10mV
	Accuracy	0.03%+0.03%FS	0.03%+0.03%FS	0.03%+0.03%FS
Input Resistance Readback	Resolution	min 0.001Ω	0.01Ω	1Ω
	Accuracy	(1/Rmin)*2%:(0.04~60Ω);(1/Rmin)*5%:(60~600Ω)	(1/Rmin)*2%:(0.25~100Ω);(1/Rmin)*5%:(100~1500Ω)	(1/Rmin)*2%:(1~300Ω);(1/Rmin)*5%:(300~3000Ω)
Input Power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	1%+1%FS	1%+1%FS	1%+1%FS
Dynamic Response Time	Rise Speed Rate	30A/ms	12A/ms	6A/ms
	Fall Speed Rate	30A/ms	12A/ms	6A/ms
	Minimum Rise Time	1ms	1ms	1ms
Power supply Parameters				
Rated Output Value (0 ℃-40 ℃)	Voltage	0~60V	0~150V	0~300V
	Current	-30A~30A	-12A~12A	-6A~6A
	Power	-200W~200W	-200W~200W	-200W~200W
Output Current Readback	Resolution	1mA	1mA	1mA
	Accuracy	<0.1%+0.1%FS	<0.1%+0.1%FS	<0.1%+0.1%FS
Output Voltage Readback	Resolution	1mV	10mV	10mV
	Accuracy	0.02%+0.02%FS	0.02%+0.02%FS	0.02%+0.02%FS
Output power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	1%+1% FS	1%+1% FS	1%+1% FS
Load Regulation	Voltage/Current	≤0.02%+0.02%FS/≤0.03%+0.03%FS	≤0.02%+0.02%FS/≤0.03%+0.03%FS	≤0.01%+0.01%FS/≤0.03%+0.03%FS
Line Regulation	Voltage/Current	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS
Ripple	Voltage/Current	≤100mVp-p/≤30mArms	≤300mVp-p/≤30mArms	≤600mVp-p/≤30mArms
Rise time	Voltage	5ms(no load) /10ms(full load)	20ms(no load) /50ms(full load)	20ms(no load) /50ms(full load)
Fall time	Voltage	5ms(no load) /5ms(full load)	20ms(no load) /20ms(full load)	20ms(no load) /20ms(full load)
Common Parameters				
AC Input / Output Parameter	Output voltage range	100VAC~240VAC	100VAC~240VAC	100VAC~240VAC
	OVP	264VAC	264VAC	264VAC
	UVP	90VAC	90VAC	90VAC
	frequency	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz
	Max.current(rms)	1Aac（AC220V）	1Aac（AC220V）	1Aac（AC220V）
Temperature sensor	Range	-20℃----120℃	-20℃----120℃	-20℃----120℃
	Accuracy	±1℃	±1℃	±1℃
Efficiency		86%	88%	88%
Dimension (D*W*H)		450mm*214mm*43.5mm	450mm*214mm*43.5mm	450mm*214mm*43.5mm
Net weight		5kg	5kg	5kg

*Load mode resistance accuracy range: lower limit: 1/(1/R+(1/R)*0.05+0.004); upper limit: 1/(1/R-(1/R)*0.05-0.004)

*This information is subject to change without notice

Specification

		IT-M3615	IT-M3622	IT-M3623
Load Parameters				
Rated Value (0 ℃-40 ℃)	Input Voltage	0~600V	0~60V	0~150V
	Input Current	0~3A	0~30A	0~12A
	Input Power	0~200W	0~400W	0~400W
	MOV	6V at 3A	0.6V at 30A	1.5V at 12A
Input Current Readback	Resolution	1mA	1mA	1mA
	Accuracy	<0.1% +0.1%FS	<0.1% +0.1%FS	<0.1% +0.1%FS
Input Voltage Readback	Resolution	10mV	1mV	10mV
	Accuracy	0.03%+0.03%FS	0.03%+0.03%FS	0.03%+0.03%FS
Input Resistance Readback	Resolution	1Ω	min 0.001Ω	0.01Ω
	Accuracy	(1/Rmin)*2%:(4~600Ω);(1/Rmin)*5%:(600~6000Ω)	(1/Rmin)*2%:(0.04~60Ω);(1/Rmin)*5%:(60~600Ω)	(1/Rmin)*2%:(0.25~100Ω);(1/Rmin)*5%:(100~1500Ω)
Input Power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	1%+1%FS	0.5%+0.5%FS	0.5%+0.5%FS
Dynamic Response Time	Rise Speed Rate	3A/ms	30A/ms	12A/ms
	Fall Speed Rate	3A/ms	30A/ms	12A/ms
	Minimum Rise Time	1ms	1ms	1ms
Power supply Parameters				
Rated Output Value (0 ℃-40 ℃)	Voltage	0~600V	0~60V	0~150V
	Current	-3A~3A	-30A~30A	-12A~12A
	Power	-200W~200W	-400W~400W	-400W~400W
Output Current Readback	Resolution	1mA	1mA	1mA
	Accuracy	<0.1%+0.1%FS	<0.1%+0.1%FS	<0.1% Imax+0.1%Icurrent
Output Voltage Readback	Resolution	10mV	1mV	10mV
	Accuracy	0.02%+0.02%FS	0.02%+0.02%FS	0.02%+0.02%FS
Output power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	1%+1% FS	0.5%+0.5%FS	0.5%+0.5%FS
Load Regulation	Voltage/Current	≤0.01%+0.01%FS/≤0.03%+0.03%FS	≤0.02%+0.02%FS/≤0.03%+0.03%FS	≤0.02%+0.02%FS/≤0.03%+0.03%FS
Line Regulation	Voltage/Current	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS
Ripple	Voltage/Current	≤1200mVp-p/≤30mArms	≤100mVp-p/≤30mArms	≤300mVp-p/≤30mArms
Rise time	Voltage	30ms(no load) /60ms(full load)	5ms(no load) /10ms(full load)	20ms(no load) 50ms(full load)
Fall time	Voltage	30ms(no load) /30ms(full load)	5ms(no load) /5ms(full load)	20ms(no load) /20ms(full load)
Common Parameters				
AC Input / Output Parameter	Output voltage range	100VAC~240VAC	100VAC~240VAC	100VAC~240VAC
	OVP	264VAC	264VAC	264VAC
	UVP	90VAC	90VAC	90VAC
	frequency	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz
	Max.current(rms)	1Aac（AC220V）	2Aac（AC220V）	2Aac（AC220V）
Temperature sensor	Range	-20℃----120℃	-20℃----120℃	-20℃----120℃
	Accuracy	±1℃	±1℃	±1℃
Efficiency		88%	86%	88%
Dimension (D*W*H)		450mm*214mm*43.5mm	450mm*214mm*43.5mm	450mm*214mm*43.5mm
Net weight		5kg	5kg	5kg

*Load mode resistance accuracy range: lower limit: 1/(1/R+(1/R)*0.05+0.004); upper limit: 1/(1/R-(1/R)*0.05-0.004)

*This information is subject to change without notice

Your Power Testing Solution

IT-M3600 Regenerative Power System

Specification

		IT-M3624	IT-M3625	IT-M3632
Load Parameters				
Rated Value (0 ℃-40 ℃)	Input Voltage	0~300V	0~600V	0~60V
	Input Current	0~6A	0~3A	0~30A
	Input Power	0~400W	0~400W	0~800W
	MOV	3V at 6A	6V at 3A	0.6V at 30A
Input Current Readback	Resolution	1mA	1mA	1mA
	Accuracy	<0.1%+0.1%FS	<0.1%+0.1%FS	<0.1%+0.1%FS
Input Voltage Readback	Resolution	10mV	10mV	1mV
	Accuracy	0.03%+0.03%FS	0.03%+0.03%FS	0.03%+0.03%FS
Input Resistance Readback	Resolution	1Ω	1Ω	min 0.001Ω
	Accuracy	(1/Rmin)*2%:(1~300Ω);(1/Rmin)*5%:(300~3000Ω)	(1/Rmin)*2%:(4~600Ω);(1/Rmin)*5%:(600~6000Ω)	(1/Rmin)*2%:(0.04~60Ω);(1/Rmin)*5%:(60~600Ω)
Input Power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	0.5%+0.5%FS	0.5%+0.5%FS	0.3%+0.3%FS
Dynamic Response Time	Rise Speed Rate	6A/ms	3A/ms	30A/ms
	Fall Speed Rate	6A/ms	3A/ms	30A/ms
	Minimum Rise Time	1ms	1ms	1ms
Power supply Parameters				
Rated Output Value (0 ℃-40 ℃)	Voltage	0~300V	0~600V	0~60V
	Current	-6A~6A	-3A~3A	-30A~30A
	Power	-400W~400W	-400W~400W	-800W~800W
Output Current Readback	Resolution	1mA	1mA	1mA
	Accuracy	<0.1%+0.1%FS	<0.1%+0.1%FS	<0.1%+0.1%FS
Output Voltage Readback	Resolution	10mV	10mV	1mV
	Accuracy	0.02%+0.02%FS	0.02%+0.02%FS	0.02%+0.02%FS
Output power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	0.5%+0.5%FS	0.5%+0.5%FS	0.3%+0.3%FS
Load Regulation	Voltage/Current	≤0.01%+0.01%FS/≤0.03%+0.03%FS	≤0.01%+0.01%FS/≤0.03%+0.03%FS	≤0.02%+0.02%FS/≤0.03%+0.03%FS
Line Regulation	Voltage/Current	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS
Ripple	Voltage/Current	≤600mVp-p/≤30mArms	≤1200mVp-p/≤30mArms	≤100mVp-p/≤30mArms
Rise time	Voltage	20ms(no load) /50ms(full load)	30ms(no load) /60ms(full load)	5ms(no load) /10ms(full load)
Fall time	Voltage	20ms(no load) /20ms(full load)	30ms(no load) /30ms(full load)	5ms(no load) /5ms(full load)
Common Parameters				
AC Input / Output Parameter	Output voltage range	100VAC~240VAC	100VAC~240VAC	100VAC~240VAC
	OVP	264VAC	264VAC	264VAC
	UVP	90VAC	90VAC	90VAC
	frequency	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz
	Max.current(rms)	2Aac（AC220V）	2Aac（AC220V）	4Aac（AC220V）
Temperature sensor	Range	-20℃----120℃	-20℃----120℃	-20℃----120℃
	Accuracy	±1℃	±1℃	±1℃
Efficiency		88%	88%	86%
Dimension (D*W*H)		450mm*214mm*43.5mm	450mm*214mm*43.5mm	450mm*214mm*43.5mm
Net weight		5kg	5kg	5kg

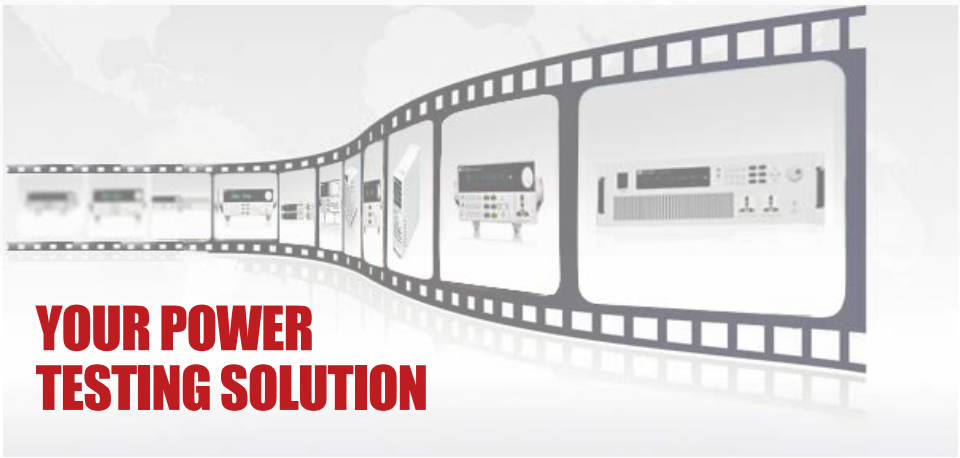
*Load mode resistance accuracy range: lower limit: 1/(1/R+(1/R)*0.05+0.004); upper limit: 1/(1/R-(1/R)*0.05-0.004)

*This information is subject to change without notice

Specification

		IT-M3633	IT-M3634	IT-M3635
		Load Parameters		
Rated Value (0 °C-40 °C)	Input Voltage	0~150V	0~300V	0~600V
	Input Current	0~12A	0~6A	0~3A
	Input Power	0~800W	0~800W	0~800W
	MOV	1.5V at 12A	3V at 6A	6V at 3A
Input Current Readback	Resolution	1mA	1mA	1mA
	Accuracy	<0.1%+0.1%FS	<0.1%+0.1%FS	<0.1%+0.1%FS
Input Voltage Readback	Resolution	10mV	10mV	10mV
	Accuracy	0.03%+0.03%FS	0.03%+0.03%FS	0.03%+0.03%FS
Input Resistance Readback	Resolution	0.01Ω	1Ω	1Ω
	Accuracy	(1/Rmin)*2%:(0.25~100Ω);(1/Rmin)*5%:(100~1500Ω)	(1/Rmin)*2%:(1~300Ω);(1/Rmin)*5%:(300~3000Ω)	(1/Rmin)*2%:(4~600Ω);(1/Rmin)*5%:(600~6000Ω)
Input Power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	0.3%+0.3%FS	0.3%+0.3%FS	0.3%+0.3%FS
Dynamic Response Time	Rise Speed Rate	12A/ms	6A/ms	3A/ms
	Fall Speed Rate	12A/ms	6A/ms	3A/ms
	Minimum Rise Time	1ms	1ms	1ms
		Power supply Parameters		
Rated Output Value (0 °C-40 °C)	Voltage	0~150V	0~300V	0~600V
	Current	-12A~12A	-6A~6A	-3A~3A
	Power	-800W~800W	-800W~800W	-800W~800W
Output Current Readback	Resolution	1mA	1mA	1mA
	Accuracy	<0.1%+0.1%FS	<0.1%+0.1%FS	<0.1%+0.1%FS
Output Voltage Readback	Resolution	10mV	10mV	10mV
	Accuracy	0.02%+0.02%FS	0.02%+0.02%FS	0.02%+0.02%FS
Output power Readback	Resolution	0.1W	0.1W	0.1W
	Accuracy	0.3%+0.3%FS	0.3%+0.3%FS	0.3%+0.3%FS
Load Regulation	Voltage/Current	≤0.02%+0.02%FS/≤0.03%+0.03%FS	≤0.01%+0.01%FS/≤0.03%+0.03%FS	≤0.01%+0.01%FS/≤0.03%+0.03%FS
Line Regulation	Voltage/Current	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS	≤0.01%+0.01%FS/≤0.02%+0.02%FS
Ripple	Voltage/Current	≤300mVp-p/≤30mArms	≤600mVp-p/≤30mArms	≤1200mVp-p/≤30mArms
Rise time	Voltage	20ms(no load) /50ms(full load)	20ms(no load) /50ms(full load)	30ms(no load) /60ms(full load)
Fall time	Voltage	20ms(no load) /20ms(full load)	20ms(no load) /20ms(full load)	30ms(no load) /30ms(full load)
		Common Parameters		
AC Input / Output Parameter	Output voltage range	100VAC~240VAC	100VAC~240VAC	100VAC~240VAC
	OVP	264VAC	264VAC	264VAC
	UVP	90VAC	90VAC	90VAC
	frequency	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz
	Max.current(rms)	4Aac（AC220V）	4Aac（AC220V）	4Aac（AC220V）
Temperature sensor	Range	-20°C----120°C	20°C----120°C	-20°C----120°C
	Accuracy	±1°C	±1°C	±1°C
Efficiency		88%	88%	88%
Dimension (D*W*H)		450mm*214mm*43.5mm	450mm*214mm*43.5mm	450mm*214mm*43.5mm
Net weight		5kg	5kg	5kg

*Load mode resistance accuracy range: lower limit: 1/(1/R+(1/R)*0.05+0.004); upper limit: 1/(1/R-(1/R)*0.05-0.004)
*This information is subject to change without notice



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