



ITECH Bidirectional DC Power Supply



YOUR POWER
TESTING SOLUTION

IT6600C Bidirectional Programmable DC Power Supply



FEATURES

- Bidirectional, integrating power supply and e-load in one
- High power density, up to 42kW in 3U
- Independent dual-channel design in 3U unit, and channels can be connected in series or parallel
- Master-slave current equalizing, output max. 10MW in parallel, no performance lost
- Dynamic response $\leq 200\mu s$
- Rise time $\leq 1ms$
- High precision $\leq 0.03\% + 30mA$
- Built-in communication interface: USB(USB-TMC/USB-VCP), LAN(Rawssocket/Modbus-TCP /Profinet/VNC/VXI-11/Web/Telnet), CAN 2.0B (CANopen/CAN2.0), digital IO
- Optional communication interface: GPIB/EtherCAT/Analog&RS232
- SCPI & ModBus protocol
- LabVIEW driver & Python Scripts

	Model	Current	Power	Model	Current	Power	Model	Current	Power		
1200V	IT6642C-1200-200	200A	42kW	1600V	IT6642C-1600-140	140A	42kW	2250V	IT6642C-2250-100	100A	42kW
	IT6684C-1200-400	400A	84kW		IT6684C-1600-280	280A	84kW		IT6684C-2250-200	200A	84kW
	IT66126C-1200-600	600A	126kW		IT66126C-1600-420	420A	126kW		IT66126C-2250-300	300A	126kW
	IT66168C-1200-800	800A	168kW		IT66168C-1600-560	560A	168kW		IT66168C-2250-400	400A	168kW
	IT66210C-1200-1000	1000A	210kW		IT66210C-1600-700	700A	210kW		IT66210C-2250-500	500A	210kW
	IT66252C-1200-1200	1200A	252kW		IT66252C-1600-840	840A	252kW		IT66252C-2250-600	600A	252kW
	IT66294C-1200-1400	1400A	294kW		IT66294C-1600-980	980A	294kW		IT66294C-2250-700	700A	294kW
	IT66336C-1200-1600	1600A	336kW		IT66336C-1600-1120	1120A	336kW		IT66336C-2250-800	800A	336kW
	IT66378C-1200-1800	1800A	378kW		IT66378C-1600-1260	1260A	378kW		IT66378C-2250-900	900A	378kW
	IT66420C-1200-2000	2000A	420kW		IT66420C-1600-1400	1400A	420kW		IT66420C-2250-1000	1000A	420kW

For more models, pls. contact ITECH.

IT6000B Regenerative

Power System

IT6000C Bidirectional

Programmable DC Power Supply



FEATURES

- Adopts SiC-base technology, integrates source and sink function in one unit
- High power density up to 18kW in compact 3U rack space, expandable up to 2MW by paralleling
- Output voltage up to 2250V
- Output current up to 8000A
- Equipped with SAS1000 to support solar array I-V curves simulation
- High regenerative efficiency up to 95%
- Bi-directional power transfer, seamless switch between sourcing and sinking
- Partial pre-compliant with LV123, LV148, DIN40839, ISO-16750-2, SAEJ1113-11, LV124 and ISO21848 automotive testing standards
- Could be used as battery simulator (with optional BSS2000 Software)

Model	Current	Power	Model	Current	Power	Model	Current	Power		
IT6005B/C-80-150	150A	5kW	300V	IT6006B/C-300-75	75A	6kW	500V	IT6006B/C-500-40	40A	6kW
IT6010B/C-80-300	300A	10kW		IT6012B/C-300-150	150A	12kW		IT6012B/C-500-80	80A	12kW
IT6015B/C-80-450	450A	15kW		IT6018B/C-300-225	225A	18kW		IT6018B/C-500-120	120A	18kW
IT6030B/C-80-900	900A	30kW		IT6036B/C-300-450	450A	36kW		IT6036B/C-500-240	240A	36kW
IT6045B/C-80-1350	1350A	45kW		IT6054B/C-300-675	675A	54kW		IT6054B/C-500-360	360A	54kW
IT6060B/C-80-1800	1800A	60kW		IT6072B/C-300-900	900A	72kW		IT6072B/C-500-480	480A	72kW
IT6075B/C-80-2040	2040A	75kW		IT6090B/C-300-1125	1125A	90kW		IT6090B/C-500-600	600A	90kW
IT6090B/C-80-2040	2040A	90kW		IT6108B/C-300-1350	1350A	108kW		IT6108B/C-500-720	720A	108kW
IT6105B/C-80-2040	2040A	105kW		IT6126B/C-300-1575	1575A	126kW		IT6126B/C-500-840	840A	126kW
IT6120B/C-80-2040	2040A	120kW		IT6144B/C-300-1800	1800A	144kW		IT6144B/C-500-960	960A	144kW

Model	Current	Power	Model	Current	Power	Model	Current	Power		
IT6006B/C-800-25	25A	6kW	1500V	IT6018B/C-1500-40	40A	18kW	2250V	IT6018B/C-2250-25	25A	18kW
IT6012B/C-800-50	50A	12kW		IT6036B/C-1500-80	80A	36kW		IT6036B/C-2250-50	50A	36kW
IT6018B/C-800-75	75A	18kW		IT6054B/C-1500-120	120A	54kW		IT6054B/C-2250-75	75A	54kW
IT6036B/C-800-150	150A	36kW		IT6072B/C-1500-160	160A	72kW		IT6072B/C-2250-100	100A	72kW
IT6054B/C-800-225	225A	54kW		IT6090B/C-1500-200	200A	90kW		IT6090B/C-2250-125	125A	90kW
IT6072B/C-800-300	300A	72kW		IT6108B/C-1500-240	240A	108kW		IT6108B/C-2250-150	150A	108kW
IT6090B/C-800-375	375A	90kW		IT6126B/C-1500-280	280A	126kW		IT6126B/C-2250-175	175A	126kW
IT6108B/C-800-450	450A	108kW		IT6144B/C-1500-320	320A	144kW		IT6144B/C-2250-200	200A	144kW
IT6126B/C-800-525	525A	126kW								
IT6144B/C-800-600	600A	144kW								

For more models, pls. contact ITECH.

IT-M3900B Regenerative Power System



FEATURES

- 2 in 1 unit - a bidirectional power supply and a regenerative load
- One button switch between source and load on front panel
- Compact design, 1U@6kW, 2U@12kW
- Battery charge and discharge test
- Battery simulation

*1 Not available for 10V models

- Partial pre-compliant with LV123, LV148, DIN40839, ISO-16750-2, SAEJ1113-11, LV124 and ISO21848 automotive testing standards*1
- Simulation of dynamic driving conditions, up to 10 million points
- 8 operation modes under Source mode :
CC/CV/CW/CR/CC+CV/CV+CR/CR+CC/CC+CV+CW+CR

IT-M3900C Bidirectional Programmable DC Power Supply



FEATURES

- Compact design, power up to 6kW in 1U space, power up to 12kW in 2U space
- Wide range of output design, one unit can be used as multiple power supplies
- Bidirectional energy flow between the DUT and grid, seamless switching across quadrants
With simple master/slave parallel connection, expand power while maintaining performance*1

*1 If 1U models>16, 2U models>8, pls. contact ITECH.Parallel connection is not recommended under PV simulation function

- Battery charging and discharging test
- Battery simulation, define the battery model
- Support photovoltaic I-V curves simulation function*2
- Support CC/CV/ CW/CR in sink mode
- Support CC/CV/CW in Source mode, and can simulate DC output internal resistance

*2 Only available for 85V models

	Model	Current	Power		Model	Current	Power		Model	Current	Power
10V	IT-M3901B/C-10-170	170A	1.7kW	32V	IT-M3902B/C-32-80	80A	2kW	80V	IT-M3902B/C-80-40	40A	2kW
	IT-M3903B/C-10-340	340A	3.4kW		IT-M3904B/C-32-160	120A	4kW		IT-M3904B/C-80-80	80A	4kW
	IT-M3905B/C-10-510	510A	5.1kW		IT-M3906B/C-32-240	240A	6kW		IT-M3906B/C-80-120	120A	6kW
	IT-M3910B/C-10-1020	1020A	10.2kW		IT-M3912B/C-32-480	480A	12kW		IT-M3912B/C-80-240	240A	12kW

	Model	Current	Power		Model	Current	Power		Model	Current	Power
85V	IT-M3902C-85-40SAS	40A	2kW	150V	IT-M3901C-150-25PV	25A	1kW	300V	IT-M3902B/C-300-20	20A	2kW
	IT-M3904C-85-80SAS	80A	4kW		IT-M3903C-150-50PV	50A	3kW		IT-M3904B/C-300-40	40A	4kW
	IT-M3906C-85-120SAS	120A	6kW		IT-M3906B/C-300-60	60A	6kW		IT-M3912B/C-300-120	120A	12kW

	Model	Current	Power		Model	Current	Power		Model	Current	Power
500V	IT-M3902B/C-500-12	12A	2kW	800V	IT-M3902B/C-800-8	8A	2kW	1500V	IT-M3906B/C-1500-12	12A	6kW
	IT-M3904B/C-500-24	24A	4kW		IT-M3904B/C-800-16	16A	4kW		IT-M3912B/C-1500-24	24A	12kW
	IT-M3906B/C-500-36	36A	6kW		IT-M3906B/C-800-24	24A	6kW				
	IT-M3912B/C-500-72	72A	12kW		IT-M3912B/C-800-48	48A	12kW				

IT-M3600 Regenerative Power System

FEATURES

- 1U half rack, high power density
- One button switch between source and load
- Bidirectional energy flow between DUT and grid *1
- Highly efficient power regeneration
- Battery test
- Battery simulation
- PV inverter I-V curve simulation

*1 only available for single unit

*2 Multiple operation modes is only available under load function



- 8 operating modes: CC/CV/CP/CR/CV+CC/CC+CR/CV+CR/CV+CC+CP+CR *2
- Independent control of multi-channels, implement synchronization or proportional tracking
- High-speed measurement, keep 10 times / s update rate even connecting 16 stand-alone units
- CC/CV priority

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 <td 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

IT-M3400 Bidirectional DC Power Supply

FEATURES

- 1U Half-rack, high power density
- Bidirectional energy flow
- High efficient power regeneration
- Battery test
- Battery simulation
- CC/CV priority

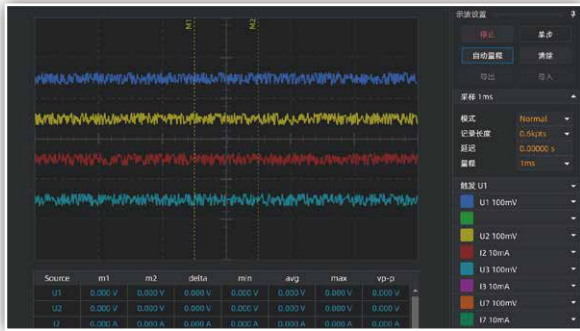


- Independent control of multi-channels with functions of synchronization and proportional tracking
- High speed measurement, 10 times/S updating rate
- Adjustable output impedance
- Programmable voltage and current rise and fall time

Model	Voltage	Current	Power	Model	Voltage	Current	Power
IT-M3412	60V	30A	200W	IT-M3414	300V	6A	200W
IT-M3422	60V	30A	400W	IT-M3424	300V	6A	400W
IT-M3432	60V	30A	800W	IT-M3434	300V	6A	800W
IT-M3413	150V	12A	200W	IT-M3415	600V	3A	200W
IT-M3423	150V	12A	400W	IT-M3425	600V	3A	400W
IT-M3433	150V	12A	800W	IT-M3435	600V	3A	800W

IT2700 Multi-channel Modular Power System

8 channels



synchronization

Group	Module	Status	Voltage	Current	Power
1	模块设置_1CH1	Fixed	10.000V	0.005A	0.500W
2	模块设置_1CH2	Fixed	20.000V	0.007A	0.914W
3	模块设置_1CH3	Fixed	25.000V	0.001A	0.500W
4	模块设置_1CH4	Fixed	50.000V	0.007A	0.350W
5	模块设置_2CH1	Fixed	10.000V	0.002A	0.200W
6	模块设置_2CH2	Fixed	20.000V	0.001A	0.200W
7	模块设置_2CH3	Fixed	25.000V	0.000A	0.500W



FEATURES

- ATE systems for R&D, design verification and manufacturing
- Compact size: 1U single unit outputs up to 8 channels
- Flexible modular system: mix and match various modules
- 2 mainframes (1U), 3 module types (DC power supply, bidirectional power supply, regenerative load)
- Free PC software, display 8-channel output
- Support Web control, use common browser to realize all functions
- The electrically isolated source load module supports 8 modules in master-slave parallel connection up to 2kW*1
- Load function: support CC, CV, CP, CR, CC+CV, CR+CV, CP+CV, CC+CR, AUTO, BSIM (battery simulation)
- Supports automatic switching for CV, CC, and CP, with selectable CC & CV priority, and internal resistance setting

*1 One chassis supports only one set of master-slave parallel connections

Voltage	Current	Power	DC power supply	Bidirectional DC power supply	Regenerative DC load
30V	15A	200W	IT27134/IT27134R	IT27334/IT27334R	IT27534/IT27534R
	30A	500W (2 slots occupied)	IT27154/IT27154R	IT27354/IT27354R	IT27554/IT27554R
60V	10A	200W	IT27135/IT27135R	IT27335/IT27335R	IT27535/IT27535R
	20A	500W (2 slots occupied)	IT27155/IT27155R	IT27355/IT27355R	IT27555/IT27555R
150V	5A	200W	IT27137/IT27137R	IT27337/IT27337R	IT27537/IT27537R
	10A	500W (2 slots occupied)	IT27157/IT27157R	IT27357/IT27357R	IT27557/IT27557R
IT2702	1U mainframe without front panel (8 slots)				
IT2703	1U mainframe with touch screen (6 slots)				
IT2704	1U mainframe without front panel (8 slots, only available for load modules)				

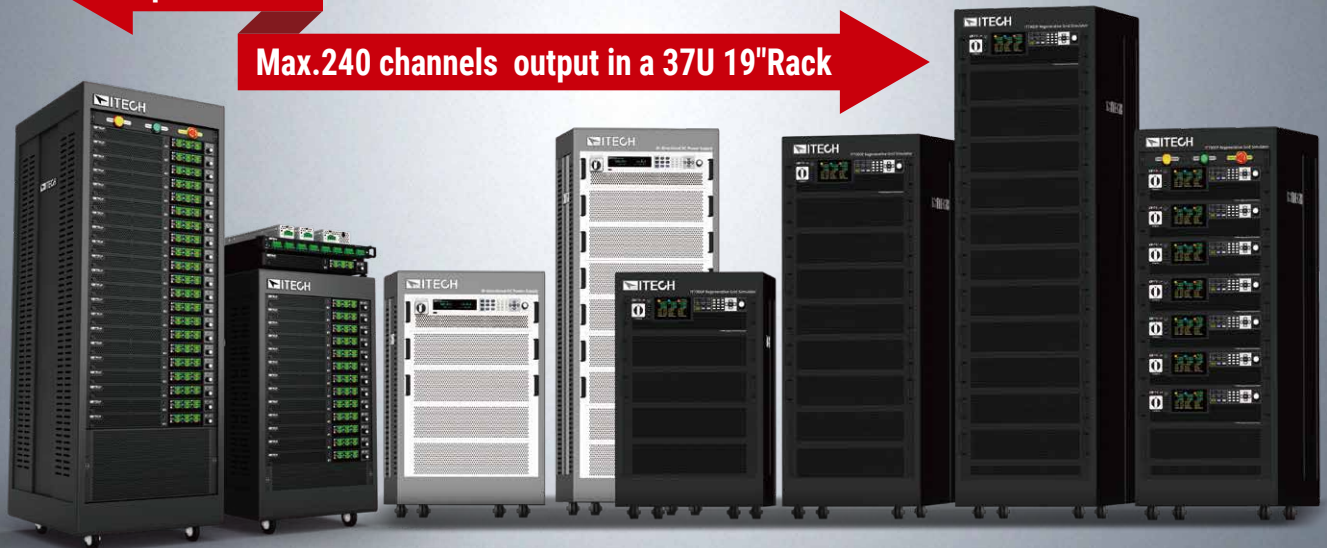
*IT27xxx should be equipped with IT2702 or IT2704

*IT27xxxR should be equipped with IT2703

Modular ,scalable and powerful , Maximum flexibility

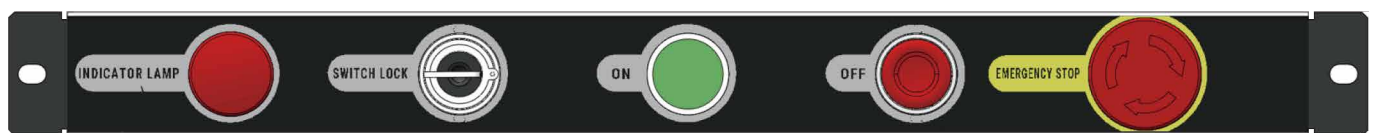
Up to 420kW

Max.240 channels output in a 37U 19"Rack



Emergency stop protection module

The ITECH system cabinet offers an optional emergency stop module, allowing users to operate the system through control buttons for emergency stop, power-on, and power-off. In the event of a system abnormally, users can quickly disconnect the AC contactor at the AC input by pressing the emergency stop button, immediately halting the power output. After troubleshooting and confirming the system's safety, users can restart the system using the control buttons to resume normal operation. This emergency stop device provides a quick solution for handling emergencies, ensuring the safety and reliability of the system.



Anti-reverse and sparking protection module

ITECH products offer optional anti-reverse connection and anti-sparking modules for charging and discharging applications of batteries. These modules are installed between the DC output of the cabinet and the device under test, providing safe and reliable physical electrical isolation. This design effectively prevents sparking during wiring and avoids equipment damage caused by reverse polarity connections, ensuring the safety and reliability of the charging and discharging test process.

ITE165A-250	Anti-reverse protection unit 750V/250A
ITE165A-400	Anti-reverse protection unit 950V/400A
ITE165A-750	Anti-reverse protection unit 1500V/750A
ITE165A-1000	Anti-reverse protection unit 1500V/1000A





Meet ITECH ELECTRONIC CO., LTD.

With over 20 years of expertise in manufacturing, ITECH Electronics has established itself as a trusted global symbol of innovation in power electronics testing instruments and solutions. Our extensive catalog boasts more than 60 product series and 1,000 models, including AC/DC programmable power supplies, AC/DC programmable electronic loads, 2-in-1 regenerative power systems, grid simulators, bidirectional DC power supplies, source meters, battery simulators, PV simulators, power meters, battery IR testers, ATE systems, and more.

From the very beginning, ITECH has been committed to innovation, consistently setting industry standards with a focus on high performance, reliability, and precision. Our broad product specifications support a wide range of sectors, including electric vehicles and automotive electronics, solar and energy storage, industrial electronics, commercial aviation, semiconductors, healthcare, academic research, etc.

Aimed to empower the electrified and sustainable future, ITECH continues to contribute with cutting-edge power test solutions and products.

Product Portfolio



- AC/DC programmable power supplies
- AC/DC programmable electronic loads
- Bidirectional DC power supplies
- 2-in-1 regenerative power systems
- Regenerative grid simulators
- High precision source meters
- Battery simulators
- PV simulators
- Power analyzers
- Battery IR testers
- ATE system

Application Fields

- EV and automotive electronics
- Renewable energy
- Battery and energy storage
- Power semiconductors
- Industrial electronics
- Commercial aviation
- Medical electronics
- Academy and research

ITECH ELECTRONIC CO., LTD.

YOUR POWER TESTING SOLUTION

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