



IT-M3100 Ultra-compact Wide Range DC Power Supply

APPLICATIONS

- Research
- Multi-channel

- Design
- ATS

Verification

Your Power Testing Solution



IT-M3100 series

Ultra-compact Wide Range DC Power Supply







To meet increasing test demands from various industries, ITECH newly released IT-M3100 series is not only innovative in terms of product technology, but also from the perspective of industry application to provide complete innovative solutions. Breaking through the traditional tech limits, in the ultra compact size of only 1U Half-Rack, the unit can not only output high power, but also has high performance and versatility. It supports the master-slave parallel mode. The full range of models support multiple stacking and parallel connection by handily designing "leg" plug-in. Fit with rack mount kit to achieve the perfect use. This new series will empower the engineers with innovation and implement test technology advancements more quickly and more accurately.

The IT-M3100 series consists of 12 models, providing 6 voltages grades, and can be combined to achieve a variety of output power. It has a flexible modular architecture, independent multi-channel design, and supports synchronous operation. Users can configure each channel according to the test requirements of DUT, up to max. 16*16 channels, to meet the needs of customized solutions. It has a wide range of application values and is suitable for a variety of applications such as research and development, design verification and automatic test systems intergration.

FEATURE

- 1U Half-Rack, Ultra-Compact Size
- Adjustable rising/falling speed of output current, to meet various test applications
- · High speed test, up to 10 times per second
- Up to 100 steps LIST operation, support output of various dynamic waveforms
- · Support CC/CV loop speed and priority setting
- · Parallel or series operation can be easily controlled by one unit
- Independent control of multi- channels, one communication card can control up to 16 channels, max.256 channels
- · Support output of different timings of each channel, can synchronize or delay the output, and supports the output of different ratios of voltage

- Support CANOPEN, LXI, SCPI and other communication protocols
- Five optional cards for plug-and-play function, providing RS232, CAN, LAN, GPIB, USB_TMC, USB_VCP, RS485, external analog and IO r communication interfaces
- Support TRACE function, can draw voltage and current waveforms in real time (Supported by program)
- Battery charging test function
- Software watchdog provides more reliable and safe automatic battery test solution
- Various protection functions such as OVP, ±OCP, ±OPP, OTP, ensure secure testing
- Provide self-locking function, when the device is self-locked, the device will not be able to output

20V

Model	Voltage	Current	Power
IT-M3110	20V	100A	400W
IT-M3120	20V	100A	850W

150V

Model	Voltage	Current	Power
IT-M3113	150V	12A	400W
IT-M3123	150V	12A	850W

30V

Model	Voltage	Current	Power
IT-M3111	30V	70A	400W
IT-M3121	30V	70A	850W

300V

Model	Voltage	Current	Power
IT-M3114	300V	6A	400W
IT-M3124	300V	6A	850W

80V

Model	Voltage	Current	Power
IT-M3112	80V	22A	400W
IT-M3122	80V	22A	850W

600V

Model	Voltage	Current	Power
IT-M3115	600V	3A	400W
IT-M3125	600V	3A	850W

^{*} Models coming soon 20V/30V/80V/150V



IT-M3100 Ultra-compact Wide Range DC Power Supply

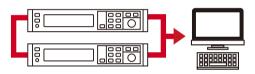
Ultra-compacted - Only 1/2 1U

IT-M3100 series power supply is only 1/2 1U. But its maximum output power is up to 850W. It has not only high power density, but also has high precision and resolution and reliable stability. The maximum output voltage is up to 600V and maximum output current is up to 100A. Since the output voltage and current are restricted by limited power, lower current can get higher voltage and lower voltage can get higher current. One unit can be used in various applications.



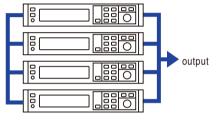
Parallel or series operation can be easily controlled by one unit

IT-M3100 is extensible. Users can have different current or voltage by units parallel or series connection. For parallel connection, the maximum units quantity is up to 4. For series connection, the maximum units quantity is up to 2.



2 units IT-3120 series connection





4 units IT-3120 parallel connection

CC&CV Priority

IT-M3100 series keep the function of CC/CV priority. It can make the test easier especially for the applications like high speed power supply or no overshooting current. Users can get fast voltage rising time by CV priority mode. This is helpful in the high speed voltage test. 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 application field such as laser test, IC test, charge and discharge test, military, transient simulation of power supply in automotive electronics and so on.



CV priority, voltage without overshoot



CC priority, current without overshoot

Synchronism

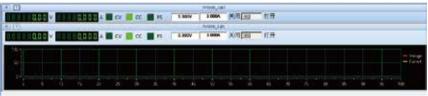
IT-M3100 has the function of synchronism between multiple channels. There are 3 options On/Offs Tracks Duplicate. The synchronism works for On/Off, Save/Recall, Priority mode, rising or falling of voltage and current value setting and function of Protect. And the voltage change can be proportional between different units.

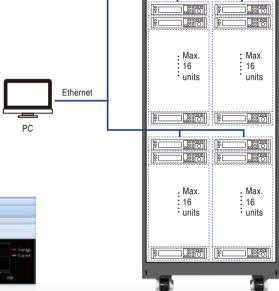
IT-M3100 Ultra-compact Wide Range DC Power Supply

Multi-channel independent control, maximum 256 channels

IT-M3100 Series is provided with independent multi-channel design. The channel sequence will be displayed when 16 units IT-M3100 combines to be a multi-channel power 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-M3100 supports maximum 16*16 channels. One 37U rack case contains 64 channels. The user may test DUTs with different power ranges by parallel connection, making tests more flexible and device usage more efficient.





IT-M3100 multi-channel power supplies are widely used in production testing, multi-channel load aging system, integrated circuits etc. fields.

Application 1 When the product is powered by DC and need to do aging test by many channels, similar to DC-DC converter, the charge part of battery aging test, and circuit board etc., the multi-channel power supply is a must, to ensure the synchronization and output consistency. Meanwhile, the program command is much simpler for system test. The user needs to send many commands to control each power supply with traditional multiple units of power supplies. By using M3100, the user only need to synchronize multiple units, and send one command to control the master unit only.

Application 2 Nowadays, the development of integrated circuits tends to be miniaturized. Most of the AC input voltage requires multiple power supplies to realize. Normally a high-voltage main input and multiple voltage auxiliary inputs are required. The multi-channel power supply is needed to do AC input test. If adopts the traditional multiple power supply to multi-path mode physically, it will cause asynchronous control, and result in the circuit board not working. The M31 series adopts the synchronous trigger output function to ensure the synchronization of the output, effectively solve this problem.



Modular design, flexible combination

IT-M3100 breaks through the shackles of traditional product design, with a patented design and side ventilation design. The flexible modular design makes it simple for IT-M3100 to stack directly, no need to purchase any accessories. The open structure brings users with different free combinations, just like blocks stacking, simple and convenient.





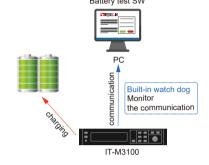
IT-M3100 Ultra-compact Wide Range DC Power Supply

Battery Charging function

IT-M3100 series can test batteries with its battery charging function. The users can set different parameters as turn off conditions: voltage, current, capacity and charging time. When any of the above parameters meet the set condition, it will shut off the test automatically. During the process, the users can observe the voltage, charging time and capacity. Additionally, IT-M3100 can be operated with software, which to achieve reliable auto-test solution.







Rack mount kit

IT-M3100 series adopts high density design with 1/2 1U space. Users may put 2-3 units on bench for initial tests at low power with less channels. When they need more power or more channels, it is convenient to use IT-E154 to gather one or multiple units IT-M3100 to install into the rack case. It is flexible for the customers to configure based on specific requirements to avoid waste.



Optional accessory

IT-M3100 series rear panel provide below listed optional extension interfaces for users to choose. Optional rack mount kit is also available.

Pictures	Model	Interface
	IT-E1205	GPIB Interface
GE 30	IT-E1206	USB/LAN Interface
	IT-E1207	RS-232/CAN Interface
	IT-E1208	Analogue interface /RS485 Interface
	IT-E1209	USB Interface
	IT-E251	Connection Cable



Standard rear panel



Rear panel with optional interface

IT-M3100 Ultra-compact Wide Range DC Power Supply

		IT-M3110	IT-M3111		
5	Voltage	0~20V	0~30V		
Rated Input Value	Current	0~100A	0~70A		
(0°C-40°C)	Power	400W	400W		
Load Regulation	Voltage	≤0.01%+30mV	≤0.01%+20mV		
(% of Output+Offset)	Current	≤0.1%+100mA	≤0.1%+100mA		
Power Regulation	Voltage	≤0.01%+20mV	≤ 0.01%+20mV		
(% of Output+Offset)	Current	≤0.1%+100mA	≤0.1%+100mA		
(7001 Output 1 Onset)	Voltage	1mV	10mV		
Setup Resolution	Current	10mA	10mA		
	Voltage	1mV	10mV		
Readback Resolution	Current	10mA	10mA		
Setting Accuracy	Voltage	≤0.03%+30mV	≤0.03%+20mV		
within 12 months 25°±5°	Current	≤0.1%+100mA	≤0.1%+70mA		
±(%of Output +Offset) Readback Accuracy					
within 12 months 25°±5°	Voltage	≤0.03%+20mV	≤0.03%+20mV		
±(%of Output +Offset)	Current	≤0.1%+100mA	≤0.1%+70mA		
Ripple	Voltage	≤80mVp-p	≤80mVp-p		
(20Hz -20MHz) Setting Temperature	Current	≤100mArms	≤70mArms		
Coefficient	Voltage	100 PPM/°C+20mV	100 PPM/°C+20mV		
± (PPM/°C+Offset)	Current	200 PPM/°C+30mA	200 PPM/°C+30mA		
Readback Temperature Coefficient	Voltage	100 PPM/°C+20mV	100 PPM/°C+20mV		
± (PPM/°C+Offset)	Current	200 PPM/°C+30mA	200 PPM/°C+30mA		
Rising Time (no load)	Voltage	≤60mS	≤80mS		
Rising Time (CR full load)		≤150mS	≤200mS		
Falling Time (no load)	Voltage	≤1\$	≤4S		
Falling Time (CR full load)	Voltage	≤300mS	≤300mS		
Dynamic Mode		Output voltage is restored to within 0.5% of the rated output voltage (10%-90%load)≤1mS			
Working Tem.		0-40 ℃			
Dimension (mm)			1U		
Net. Weight		5Kg			
			meter		
	Voltage 1	176V~ 264V (400W)	176V~ 264V (400W)		
AC Input	Voltage 2	99V~ 121V (400W)	99V~ 121V (400W)		
	Frequency	47Hz~63Hz	47Hz~63Hz		
Setup Stability-30min	Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
(PPM+Offset)	Current	200 PPM/°C+50mA	200 PPM/ C +50mA		
Setup Stability-8h	Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
(PPM+Offset)	Current	200 PPM/°C+50mA	200 PPM/ C+50mA		
Readback Stability-30min	Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
(PPM+Offset)	Current	200 PPM/°C+70mA	200 PPM/℃+70mA		
Readback Stability-8h	Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
(PPM+Offset)	Current	200 PPM/°C+70mA	200 PPM/°C+70mA		
Efficiency		76%	76%		
Remote Sense Compensa	tion Voltage	3V	3V		
Command Response Time		10~600mS	10~600mS		
Power Factor		0.9	0.9		
Maximum Input Current		6A	6A		
Maximum Input Apparent I	Power	600VA	600VA		
Storage Tem.		-10°C~70°C	-10 °C ~70 °C		
Protection		OVP/OCP/OTP	OVP/OCP/OTP		
	-1\				
Isolation (output to ground)		500V	500V		

^{*}This information is subject to change without notice.

IT-M3100 Ultra-compact Wide Range DC Power Supply

		IT-M3112	IT-M3113	
	Voltage	0~80V	0~150V	
Rated Input Value	Current	0~22A	0~12A	
(0 ℃-40 ℃)	Power	400W	400W	
Load Regulation		≤0.01%+40mV	≤0.01%+100mV	
(% of Output+Offset)	Voltage	≤0.1%+40mV ≤0.1%+20mA	≤0.1%+100mV ≤0.1%+20mA	
	Current	≤0.1%+20mA ≤0.01%+40mV	≤0.01%+40mV	
Power Regulation	Voltage			
(% of Output+Offset)	Current	≤0.1%+20mA	≤0.1%+20mA	
Setup Resolution	Voltage	10mV	10mV	
	Current	1mA	1mA	
Readback Resolution	Voltage	10mV	10mV	
Setting Accuracy	Current	1mA	1mA	
within 12 months 25°±5°	Voltage	≤0.03%+40mV	≤0.03%+75mV	
±(%of Output +Offset)	Current	≤0.1%+30mA	≤0.1%+10mA	
Readback Accuracy within 12 months 25°±5°	Voltage	≤0.03%+40mV	≤0.03%+75mV	
±(%of Output +Offset)	Current	≤0.1%+30mA	≤0.1%+10mA	
Ripple	Voltage	≤100mVp-p	≤150mVp-p	
(20Hz -20MHz)	Current	≤40mArms	≤20mArms	
Setting Temperature Coefficient	Voltage	100 PPM/°C+20mV	100 PPM/°C+20mV	
± (PPM/°C+Offset)	Current	200 PPM/°C+30mA	200 PPM/°C+30mA	
Readback Temperature	Voltage	100 PPM/°C+20mV	100 PPM/ C+20mV	
Coefficient ± (PPM/C+Offset)	Current	200 PPM/°C+30mA	200 PPM/°C+30mA	
Rising Time (no load)	Voltage	≤80mS	≤80mS	
Rising Time (CR full load)	Voltage	≤200mS	≤200mS	
Falling Time (no load)	Voltage	≤4S	≤4S	
Falling Time (CR full load)	Voltage	≤300mS	≤300mS	
Dynamic Mode		Output voltage is restored to within 0.5% of the rated output voltage (10%-90%load)≤1mS		
Working Tem.		0-40℃		
Net. Dimension (mm)		½1U		
Net. Weight		5Kg		
		Par	ameter	
	Voltage 1	176V~ 264V (400W)	176V~ 264V (400W)	
AC Input	Voltage 2	99V~ 121V (400W)	99V~ 121V (400W)	
	Frequency	47Hz~63Hz	47Hz~63Hz	
Setup Stability-30min	Voltage	100 PPM/°C+10mV	100 PPM/C+10mV	
(PPM+Offset)	Current	200 PPM/°C+50mA	200 PPM/C+50mA	
Setup Stability-8h	Voltage	100 PPM/°C+10mV	100 PPM/C+10mV	
(PPM+Offset)	Current	200 PPM/°C+50mA	200 PPM/C +50mA	
Readback Stability-30min	Voltage	100 PPM/°C+10mV	100 PPM/C+10mV	
(PPM+Offset)	Current	200 PPM/°C+70mA	200 PPM/C+70mA	
Readback Stability-8h	Voltage	100 PPM/°C+10mV	100 PPM/C+10mV	
(PPM+Offset)	Current			
	Ourient	200 PPM/°C+70mA	200 PPM/C+70mA	
Efficiency	V-lt	76%	76%	
Remote Sense Compensa Command Response Time		3V	3V	
		10~600mS	10~600mS	
Power Factor		0.9	0.9	
Maximum Input Current		6A	6A	
Maximum Input Apparent I	ower	60VA	600VA	
Storage Tem.		-10°C~70°C	-10℃~70℃	
Protection		OVP/OCP/OTP	OVP/OCP/OTP	
Isolation (output to ground	d)	500V	500V	

^{*}This information is subject to change without notice.

IT-M3100 Ultra-compact Wide Range DC Power Supply

		IT-M3114	IT-M3115	
	Voltage	0~300V	0~600V	
Rated Input Value	Current	0~6A	0~3A	
(0 ℃-40 ℃)	Power	400W	400W	
Load Regulation		≤0.01%+100mV	400W ≤0.01%+150mV	
(% of Output+Offset)	Current	≤0.1%+20mA	≤0.1%+20mA	
Power Regulation	Voltage	≤0.01%+150mV	≤0.01%+150mV	
(% of Output+Offset)	Current	≤0.1%+20mA	≤0.1%+20mA	
Setup Resolution	Voltage	10mV	10mV	
	Current	1mA	1mA	
Readback Resolution	Voltage	10mV	10mV	
	Current	1mA	1mA	
Setting Accuracy within 12 months 25°±5°	Voltage	≤0.03%+200mV	≤0.03%+200mV	
±(%of Output +Offset)	Current	≤0.1%+30mA	≤0.1%+30mA	
Readback Accuracy	Voltage	≤0.03%+200mV	≤0.03%+200mV	
within 12 months 25°±5° ±(%of Output +Offset)	Current	≤0.1%+30mA	≤0.1%+30mA	
Ripple	Voltage	≤300mVp-p	≤600mVp-p	
(20Hz -20MHz)	Current	≤50mArms	≤30mArms	
Setting Temperature	Voltage	100 PPM/°C+100mV	100 PPM/°C+100mV	
Coefficient ± (PPM/C+Offset)	Current	200 PPM/°C+10mA	200 PPM/°C+10mA	
Readback Temperature	Voltage	100 PPM/°C+100mV	100 PPM/°C+100mV	
Coefficient ± (PPM/C+Offset)	Current	200 PPM/°C+10mA	200 PPM/°C+10mA	
	Voltage	≤60mS	≤60mS	
Rising Time (no load)	Voltage	≤200mS		
Rising Time (CR full load) Falling Time (no load)	Voltage		≤200mS	
Falling Time (CR full load)	-	≤6\$	≤6\$	
	Voltage	≤ 300mS	≤300mS	
Dynamic Mode Working Tem.		Output voltage is restored to within 0.5% of the rated output voltage (10%-90%load) ≤ 1mS 0-40°C		
		%1U		
Dimension (mm)			Kg	
Net. Weight				
	Voltage 1	176V~ 264V (400W)	ameter 176V~ 264V (400W)	
A O . I ===== t	-	, ,	, ,	
AC Input	Voltage 2	99V~ 121V (400W)	99V~ 121V (400W)	
	Frequency	47Hz~63Hz	47Hz~63Hz	
Setup Stability-30min	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV	
(PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA	
Setup Stability-8h	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV	
(PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA	
Readback Stability-30min	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV	
(PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA	
Readback Stability-8h	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV	
(PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA	
Efficiency		76%	76%	
Remote Sense Compensa	tion Voltage	3V	3V	
Command Response Time		10~600mS	10~600mS	
Power Factor		0.9	0.9	
Maximum Input Current		6A	6A	
Maximum Input Apparent F	Power	600VA	600VA	
Storage Tem.			-10°C~70°C	
		-10°C~70°C		
Protection		OVP/OCP/OTP	OVP/OCP/OTP	
Isolation (output to ground)		600V	600V	

^{*}This information is subject to change without notice.

IT-M3100 Ultra-compact Wide Range DC Power Supply

	IT-M3120	IT-M3121		
Voltage	0~20V	0~30V		
Current	0~100A	0~70A		
Power	850W	850W		
Voltage	≤0.01%+30mV	≤0.01%+20mV		
Current	≤0.1%+100mA	≤0.1%+100mA		
Voltage	≤0.01%+20mV	≤0.01%+20mV		
Current	≤0.1%+100mA	≤0.1%+100mA		
Voltage	1mV	10mV		
Current	10mA	10mA		
Voltage	1mV	10mV		
Current	10mA	10mA		
Voltage	≤0.03%+20mV	≤0.03%+20mV		
Current	≤0.1%+100mA	≤0.1%+70mA		
Voltage	≤0.03%+20mV	≤0.03%+20mV		
Current	≤0.1%+100mA	≤0.1%+70mA		
Voltage	≤80mVp-p	≤80mVp-p		
Current	≤100mArms	≤70mArms		
Voltage	100 PPM/°C+20mV	100 PPM/°C +20mV		
Current	200 PPM/°C+30mA	200 PPM/°C+30mA		
Voltage	100 PPM/°C+20mV	100 PPM/°C +20mV		
Current	200 PPM/°C+30mA	200 PPM/ C+30mA		
Voltage	≤60mS	≤80mS		
Voltage	≤150mS	≤200mS		
Voltage	≤1\$	≤4S		
Voltage	≤300mS	≤300mS		
	Output voltage is restored to within 0.5% of the rated output voltage (10%-90%load)≤1mS			
	0-40°C			
	½1U			
	5Kg			
Parameter				
Voltage 1	176V~ 264V (full load)	176V~ 264V (full load)		
Voltage 2	99V~ 121V (600W)	99V~ 121V (600W)		
Frequency	47Hz~63Hz	47Hz~63Hz		
Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
Current	200 PPM/°C+50mA	200 PPM/°C+50mA		
Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
Current	200 PPM/°C+50mA	200 PPM/°C+50mA		
Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
Current	200 PPM/°C+70mA	200 PPM/°C+70mA		
Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV		
Current	200 PPM/°C+70mA	200 PPM/°C+70mA		
	82%	82%		
ion Voltage	3V	3V		
	10~600mS	10~600mS		
	0.98	0.98		
	11A	11A		
Power	1000VA	1000VA		
	-10°C∼70°C	-10°C~70°C		
	OVP/OCP/OTP	OVP/OCP/OTP		
	Current Power Voltage Current Voltage Voltage Voltage Voltage Voltage Voltage Voltage Voltage Voltage Current	Voltage 0-20V Current 0-100A Power 850W Voltage ≤ 0.01%+30mV Current ≤ 0.11%+20mV Current ≤ 0.11%+20mV Current 10mA Voltage 1mV Current 10mA Voltage ≤ 0.03%+20mV Current ≤ 0.1%+100mA Voltage ≤ 10mAms Voltage ≤ 10mAms Voltage ≤ 10mAms Voltage 100 PPM°C+20mV Current 200 PPM°C+30mA Voltage ≤ 150mS Voltage ≤ 10mPM°C+30mA Voltage 100		

^{*}This information is subject to change without notice.

IT-M3100 Ultra-compact Wide Range DC Power Supply

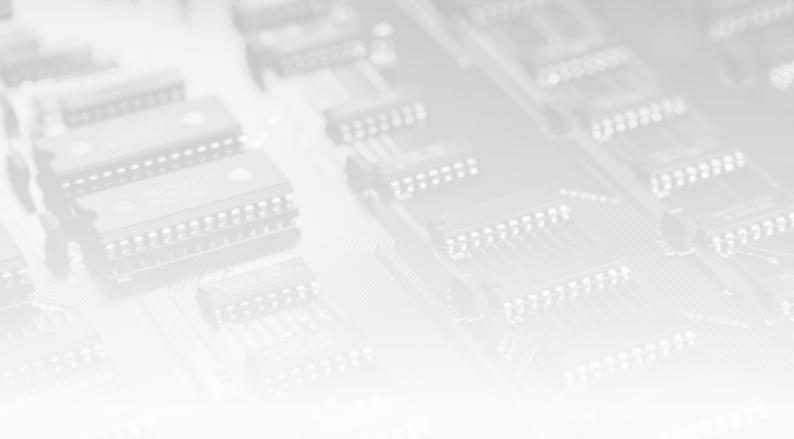
		IT-M3122	IT-M3123	
Datad Innet Value	Voltage	0~80V	0~150V	
Rated Input Value	Current	0~22A	0~12A	
(0°C-40°C)	Power	850W	850W	
Load Regulation	Voltage	≤0.01%+40mV	≤0.01%+100mV	
(% of Output+Offset)	Current	≤0.1%+20mA	≤0.1%+20mA	
<u> </u>	Voltage	≤0.01%+40mV	≤0.01%+40mV	
Power Regulation	Current	≤0.1%+20mA	≤0.1%+20mA	
(% of Output+Offset)	Voltage	10mV	10mV	
Setup Resolution	-	1mA	1mA	
	Current	10mV	10mV	
Readback Resolution	Voltage			
Setting Accuracy	Current	1mA	1mA	
within 12 months 25°±5°	Voltage	≤0.03%+40mV	≤0.03%+75mV	
±(%of Output +Offset)	Current	≤ 0.1%+30mA	≤0.1%+10mA	
Readback Accuracy within 12 months 25°±5°	Voltage	≤0.03%+40mV	≤0.03%+75mV	
±(%of Output +Offset)	Current	≤0.1%+30mA	≤0.1%+10mA	
Ripple	Voltage	≤100mVp-p	≤150mVp-p	
(20Hz -20MHz)	Current	≤40mArms	≤20mArms	
Setting Temperature	Voltage	100 PPM/°C+20mV	100 PPM/°C+20mV	
Coefficient ± (PPM/C+Offset)	Current	200 PPM/°C+30mA	200 PPM/°C+30mA	
Readback Temperature	Voltage	100 PPM/°C+20mV	100 PPM/°C+20mV	
Coefficient ± (PPM/C+Offset)	Current	200 PPM/°C+30mA	200 PPM/°C+30mA	
Rising Time (no load)	Voltage	≤80mS	≤80mS	
Rising Time (CR full load)	Voltage	<200mS	≤200mS	
Falling Time (no load)	Voltage	≤4S	≤4S	
Falling Time (CR full load)	-	≤300mS	≤300mS	
Dynamic Mode	1 11.31		e rated output voltage (10%-90%load)≤1mS	
Working Tem.		0-40°€		
Dimension (mm)		½1U		
Net. Weight		54		
Net. Weight			meter	
	Voltage 1	176V~ 264V (full load)	176V~ 264V (full load)	
AC Input	Voltage 2	99V~ 121V (600W)	99V~ 121V (600W)	
710 mpat	Frequency	47Hz~63Hz	47Hz~63Hz	
Setup Stability-30min				
Setup Stability-Sullilli			100 DDM/°C + 10m\/	
(PPM+Offset)	Voltage	100 PPM/°C+10mV	100 PPM/°C+10mV	
(PPM+Offset)	Current	200 PPM/°C+50mA	200 PPM/°C+50mA	
Setup Stability-8h	Current Voltage	200 PPM/°C+50mA 100 PPM/°C+10mV	200 PPM/°C+50mA 100 PPM/°C+10mV	
Setup Stability-8h (PPM+Offset)	Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA	
Setup Stability-8h (PPM+Offset) Readback Stability-30min	Current Voltage Current Voltage	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset)	Current Voltage Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h	Current Voltage Current Voltage Current Voltage Voltage	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset)	Current Voltage Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency	Current Voltage Current Voltage Current Voltage Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency Remote Sense Compensa	Current Voltage Current Voltage Current Voltage Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency Remote Sense Compensa	Current Voltage Current Voltage Current Voltage Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82%	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82%	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency	Current Voltage Current Voltage Current Voltage Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82% 3V	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82% 3V	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency Remote Sense Compensa Command Response Time	Current Voltage Current Voltage Current Voltage Current Voltage Current	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82% 3V 10~600mS	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82% 3V 10~600mS	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency Remote Sense Compensa Command Response Time	Current Voltage Current Voltage Current Voltage Current tion Voltage	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82% 3V 10~600mS 0.98	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 82% 3V 10~600mS 0.98	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency Remote Sense Compensa Command Response Time Power Factor Maximum Input Current	Current Voltage Current Voltage Current Voltage Current tion Voltage	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 300 PPM/°C+70mA 82% 3V 10~600mS 0.98 11A 1000VA	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+70mA 200 PPM/°C+70mA 300 PPM/°C+70mA 82% 3V 10~600mS 0.98 11A 1000VA	
Setup Stability-8h (PPM+Offset) Readback Stability-30min (PPM+Offset) Readback Stability-8h (PPM+Offset) Efficiency Remote Sense Compensa Command Response Time Power Factor Maximum Input Current Maximum Input Apparent	Current Voltage Current Voltage Current Voltage Current tion Voltage	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+10mV 200 PPM/°C+70mA 3V 10~600mS 0.98 11A	200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+50mA 100 PPM/°C+10mV 200 PPM/°C+70mA 100 PPM/°C+70mA 200 PPM/°C+70mA 300 PPM/°C+70mA 82% 3V 10~600mS 0.98 11A	

^{*}This information is subject to change without notice.

IT-M3100 Ultra-compact Wide Range DC Power Supply

		IT-M3124	IT-M3125
Rated Input Value	Voltage	0~300V	0~600V
(0°C-40°C)	Current	0~6A	0~3A
(0 0 10 0)	Power	850W	850W
Load Regulation	Voltage	≤0.01%+100mV	≤0.01%+150mV
(% of Output+Offset)	Current	≤0.1%+20mA	≤0.1%+20mA
Power Regulation	Voltage	≤0.01%+150mV	≤0.01%+150mV
(% of Output+Offset)	Current	≤0.1%+20mA	≤0.1%+20mA
Setup Resolution	Voltage	10mV	10mV
	Current	1mA	1mA
Readback Resolution	Voltage	10mV	10mV
	Current	1mA	1mA
Setting Accuracy within 12 months 25°±5° ±(%of Output +Offset) Readback Accuracy within 12 months 25°±5° ±(%of Output +Offset)	Voltage	≤0.03%+200mV	≤0.03%+200mV
	Current	≤0.1%+30mA	≤0.1%+30mA
	Voltage	≤0.03%+200mV	≤0.03%+200mV
	Current	≤0.1%+30mA	≤0.1%+30mA
Ripple	Voltage	≤300mVp-p	≤600mVp-p
(20Hz -20MHz)	Current	≤50mArms	≤30mArms
Setting Temperature	Voltage	100 PPM/°C+100mV	100 PPM/°C+100mV
Coefficient ± (PPM/°C+Offset)	Current	200 PPM/°C+10mA	200 PPM/°C+10mA
Readback Temperature	Voltage	100 PPM/°C+100mV	100 PPM/°C+100mV
Coefficient ± (PPM/°C+Offset)	Current	200 PPM/°C+10mA	200 PPM/°C+10mA
Rising Time (no load)	Voltage	≤60mS	≤60mS
Rising Time (CR full load)	Voltage	≤200mS	≤200mS
Falling Time (no load)	Voltage	≤6S	≤6S
Falling Time (CR full load)	-	≤300mS	≤300mS
Dynamic Mode	Output voltage is restored to within 0.5% of the rated output voltage (10%-90%load) ≤1mS		
Working Tem.	0-40°C		
Dimension (mm)	½1U		
Net. Weight	5Kg		
Trota Trongine	Parameter		
AC Input	Voltage 1	176V~ 264V (full load)	176V~ 264V (full load)
	Voltage 2	99V~ 121V (600W)	99V~ 121V (600W)
	Frequency	47Hz~63Hz	47Hz~63Hz
Setup Stability-30min	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV
(PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA
Setup Stability-8h	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV
(PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA
Readback Stability-30min	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV
(PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA
	Voltage	100 PPM/°C+30mV	100 PPM/°C+30mV
Readback Stability-8h (PPM+Offset)	Current	200 PPM/°C+60mA	200 PPM/°C+60mA
· · · · · · · · · · · · · · · · · · ·	Ourront		82%
Efficiency Remote Sense Compensation Voltage		82% 3V	62% 3V
Command Response Time		3V 10~600mS	10~600mS
Power Factor		0.98	
Maximum Input Current			0.98
Maximum Input Apparent Power		11A	11A
		1000VA	1000VA
Storage Tem.		-10°C~70°C	-10°C~70°C
Protection		OVP/OCP/OTP	OVP/OCP/OTP
Isolation (output to ground)		600V	600V

^{*}This information is subject to change without notice.





This information is subject to change without notice. For more information, please contact ITECH.

Taipei

Add: No.918, Zhongzheng Rd., Zhonghe Dist., New Taipei City

235, Taiwan

Web: www.itechate.com.tw TEL: +886-3-6684333

E-mail: taiwan@itechate.com.tw

Xishan Factory

Add: No.108, XiShanqiao Nanlu, Nanjing city, 210039, China

TEL: +86-25-52415098 Web: www.itechate.com

Meishan Factory

Add: No.150, Yaonanlu, Meishan Cun, Nanjing city, 210039, China

TEL: +86-25-52415099 Web: www.itechate.com





ΓΕCH Facebook

ITECH Web