

Product

IT-M3100 Ultra-compact Wide Range
DC Power Supply

Grand Unveiling of IT-M series

Extendable

High Performance

Multiple choices of models

Ultra-compact size

IT-M3100 Ultra-compact Wide Range DC Power Supply

APPLICATIONS

- Research
- Design
- Verification
- Multi-channel
- ATS

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 integration.

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 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, \pm OCP, \pm 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 |

30V

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

80V

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

150V

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

300V

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

600V

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

* Models coming soon 20V/30V/80V/150V

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IT-M3100 Ultra-compact Wide Range DC Power Supply

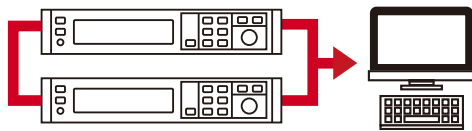
Ultra-compacted - Only 1/2 1U

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.

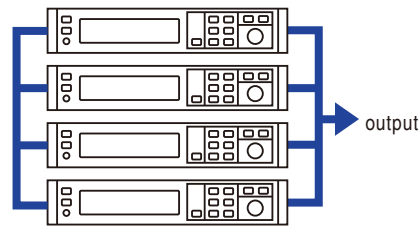


Parallel or series operation can be easily controlled by one unit

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

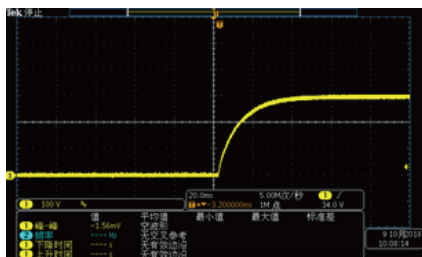


4 units IT-3120 parallel connection

*The maximum voltage is not more than 1100V.

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/Off、Track、 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.

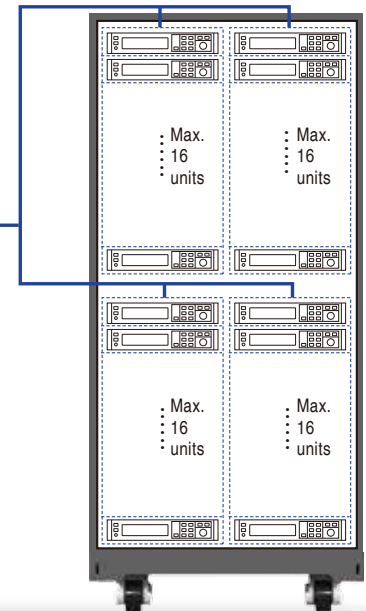
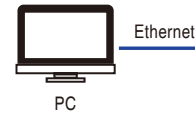
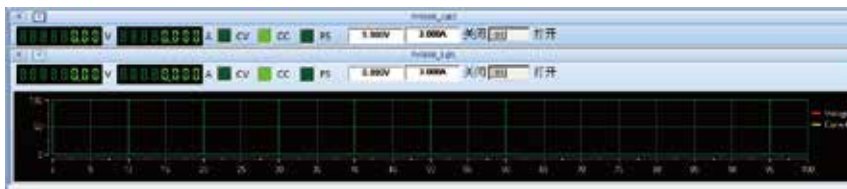
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IT-M3100 Ultra-compact Wide Range DC Power Supply

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 1 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.



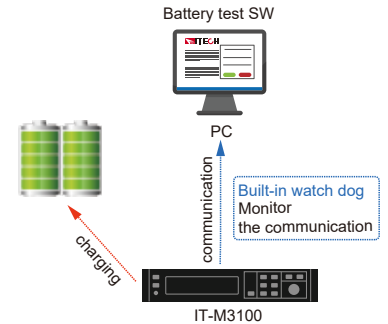
* Stack up to 10 units without rack mount kit

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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 | GPB Interface |
| | 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

Your Power Testing Solution

IT-M3100 Ultra-compact Wide Range DC Power Supply

Specification

| | | IT-M3110 | IT-M3111 |
|---|--|------------------------|-----------------------|
| Rated Input Value (0 °C~40 °C) | Voltage | 0~20V | 0~30V |
| | Current | 0~100A | 0~70A |
| | Power | 400W | 400W |
| Load Regulation (% of Output+Offset) | Voltage | ≤ 0.01%+30mV | ≤ 0.01%+20mV |
| | Current | ≤ 0.1%+100mA | ≤ 0.1%+100mA |
| Power Regulation (% of Output+Offset) | Voltage | ≤ 0.01%+20mV | ≤ 0.01%+20mV |
| | Current | ≤ 0.1%+100mA | ≤ 0.1%+100mA |
| Setup Resolution | Voltage | 1mV | 10mV |
| | Current | 10mA | 10mA |
| Readback Resolution | Voltage | 1mV | 10mV |
| | Current | 10mA | 10mA |
| Setting Accuracy within 12 months 25°±5° ± (% of Output +Offset) | Voltage | ≤ 0.03%+30mV | ≤ 0.03%+20mV |
| | Current | ≤ 0.1%+100mA | ≤ 0.1%+70mA |
| Readback Accuracy within 12 months 25°±5° ± (% of Output +Offset) | Voltage | ≤ 0.03%+20mV | ≤ 0.03%+20mV |
| | Current | ≤ 0.1%+100mA | ≤ 0.1%+70mA |
| Ripple (20Hz ~20MHz) | Voltage | ≤ 80mVp-p | ≤ 80mVp-p |
| | Current | ≤ 100mA _{rms} | ≤ 70mA _{rms} |
| Setting Temperature Coefficient ± (PPM/ °C +Offset) | Voltage | 100 PPM/°C+20mV | 100 PPM/°C+20mV |
| | Current | 200 PPM/°C+30mA | 200 PPM/°C+30mA |
| Readback Temperature Coefficient ± (PPM/ °C +Offset) | Voltage | 100 PPM/°C+20mV | 100 PPM/°C+20mV |
| | Current | 200 PPM/°C+30mA | 200 PPM/°C+30mA |
| Rising Time (no load) | Voltage | ≤ 60mS | ≤ 80mS |
| Rising Time (CR full load) | Voltage | ≤ 150mS | ≤ 200mS |
| Falling Time (no load) | Voltage | ≤ 1S | ≤ 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 °C | | |
| Dimension (mm) | 510.5*234*52.8 | | |
| Net. Weight | 5Kg | | |
| Parameter | | | |
| AC Input | Voltage 1 | 176V~ 264V (400W) | 176V~ 264V (400W) |
| | Voltage 2 | 99V~ 121V (400W) | 99V~ 121V (400W) |
| | Frequency | 47Hz~63Hz | 47Hz~63Hz |
| Setup Stability-30min (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/ °C +10mV |
| | Current | 200 PPM/°C+50mA | 200 PPM/ °C +50mA |
| Setup Stability-8h (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/ °C +10mV |
| | Current | 200 PPM/°C+50mA | 200 PPM/ °C +50mA |
| Readback Stability-30min (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/ °C +10mV |
| | Current | 200 PPM/°C+70mA | 200 PPM/ °C +70mA |
| Readback Stability-8h (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/ °C +10mV |
| | Current | 200 PPM/°C+70mA | 200 PPM/ °C +70mA |
| Efficiency | 76% | | |
| Remote Sense Compensation Voltage | 3V | | |
| Command Response Time | 10~600mS | | |
| Power Factor | 0.9 | | |
| Maximum Input Current | 6A | | |
| Maximum Input Apparent Power | 600VA | | |
| Storage Tem. | -10°C~70°C | | |
| Protection | OVP/OC/OTP | | |
| Isolation (output to ground) | 500V | | |

*This information is subject to change without notice.

Your Power Testing Solution

IT-M3100 Ultra-compact Wide Range DC Power Supply

Specification

| | | IT-M3112 | IT-M3113 |
|---|---|----------------------|----------------------|
| Rated Input Value (0℃~40℃) | Voltage | 0~80V | 0~150V |
| | Current | 0~22A | 0~12A |
| | Power | 400W | 400W |
| Load Regulation (%of Output+Offset) | Voltage | ≤0.01%+40mV | ≤0.01%+100mV |
| | Current | ≤0.1%+20mA | ≤0.1%+20mA |
| Power Regulation (%of Output+Offset) | Voltage | ≤0.01%+40mV | ≤0.01%+40mV |
| | 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) | Voltage | ≤0.03%+40mV | ≤0.03%+75mV |
| | Current | ≤0.1%+30mA | ≤0.1%+10mA |
| Readback Accuracy within 12 months 25°±5° ±(%of Output +Offset) | Voltage | ≤0.03%+40mV | ≤0.03%+75mV |
| | Current | ≤0.1%+30mA | ≤0.1%+10mA |
| Ripple (20Hz ~20MHz) | Voltage | ≤100mVp-p | ≤150mVp-p |
| | Current | ≤40mA _{rms} | ≤20mA _{rms} |
| Setting Temperature Coefficient ± (PPM/℃ +Offset) | Voltage | 100 PPM/℃+20mV | 100 PPM/℃ +20mV |
| | Current | 200 PPM/℃+30mA | 200 PPM/℃ +30mA |
| Readback Temperature Coefficient ± (PPM/℃ +Offset) | Voltage | 100 PPM/℃+20mV | 100 PPM/℃ +20mV |
| | Current | 200 PPM/℃+30mA | 200 PPM/℃ +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) | 510.5*234*52.8 | | |
| Net. Weight | 5Kg | | |
| Parameter | | | |
| AC Input | Voltage 1 | 176V~ 264V (400W) | 176V~ 264V (400W) |
| | Voltage 2 | 99V~ 121V (400W) | 99V~ 121V (400W) |
| | Frequency | 47Hz~63Hz | 47Hz~63Hz |
| Setup Stability-30min (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃ +10mV |
| | Current | 200 PPM/℃+50mA | 200 PPM/℃ +50mA |
| Setup Stability-8h (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃ +10mV |
| | Current | 200 PPM/℃+50mA | 200 PPM/℃ +50mA |
| Readback Stability-30min (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃ +10mV |
| | Current | 200 PPM/℃+70mA | 200 PPM/℃ +70mA |
| Readback Stability-8h (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃ +10mV |
| | Current | 200 PPM/℃+70mA | 200 PPM/℃ +70mA |
| Efficiency | 76% | | 76% |
| Remote Sense Compensation Voltage | 3V | | 3V |
| Command Response Time | 10~600mS | | 10~600mS |
| Power Factor | 0.9 | | 0.9 |
| Maximum Input Current | 6A | | 6A |
| Maximum Input Apparent Power | 60VA | | 600VA |
| Storage Tem. | -10℃~70℃ | | -10℃ ~70℃ |
| Protection | OVP/OC/OTP | | OVP/OC/OTP |
| Isolation (output to ground) | 500V | | 500V |

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Your Power Testing Solution

IT-M3100 Ultra-compact Wide Range DC Power Supply

Specification

| | | IT-M3114 | IT-M3115 |
|---|---|-----------------------|-----------------------|
| Rated Input Value (0 °C~40 °C) | Voltage | 0~300V | 0~600V |
| | Current | 0~6A | 0~3A |
| | Power | 400W | 400W |
| Load Regulation (% of Output+Offset) | Voltage | ≤ 0.01%+100mV | ≤ 0.01%+150mV |
| | Current | ≤ 0.1%+20mA | ≤ 0.1%+20mA |
| Power Regulation (% of Output+Offset) | Voltage | ≤ 0.01%+150mV | ≤ 0.01%+150mV |
| | 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) | Voltage | ≤ 0.03%+200mV | ≤ 0.03%+200mV |
| | Current | ≤ 0.1%+30mA | ≤ 0.1%+30mA |
| Readback Accuracy within 12 months 25°±5° ±(%of Output +Offset) | Voltage | ≤ 0.03%+200mV | ≤ 0.03%+200mV |
| | Current | ≤ 0.1%+30mA | ≤ 0.1%+30mA |
| Ripple (20Hz ~20MHz) | Voltage | ≤ 300mVp-p | ≤ 600mVp-p |
| | Current | ≤ 50mA _{rms} | ≤ 30mA _{rms} |
| Setting Temperature Coefficient ± (PPM/ °C +Offset) | Voltage | 100 PPM/°C+100mV | 100 PPM/°C+100mV |
| | Current | 200 PPM/°C+10mA | 200 PPM/°C+10mA |
| Readback Temperature Coefficient ± (PPM/ °C +Offset) | Voltage | 100 PPM/°C+100mV | 100 PPM/°C+100mV |
| | 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) | 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°C | | |
| Dimension (mm) | 510.5*234*52.8 | | |
| Net. Weight | 5Kg | | |
| Parameter | | | |
| AC Input | Voltage 1 | 176V~ 264V (400W) | 176V~ 264V (400W) |
| | Voltage 2 | 99V~ 121V (400W) | 99V~ 121V (400W) |
| | Frequency | 47Hz~63Hz | 47Hz~63Hz |
| Setup Stability-30min (PPM+Offset) | Voltage | 100 PPM/°C+30mV | 100 PPM/°C+30mV |
| | Current | 200 PPM/°C+60mA | 200 PPM/°C+60mA |
| Setup Stability-8h (PPM+Offset) | Voltage | 100 PPM/°C+30mV | 100 PPM/°C+30mV |
| | Current | 200 PPM/°C+60mA | 200 PPM/°C+60mA |
| Readback Stability-30min (PPM+Offset) | Voltage | 100 PPM/°C+30mV | 100 PPM/°C+30mV |
| | Current | 200 PPM/°C+60mA | 200 PPM/°C+60mA |
| Readback Stability-8h (PPM+Offset) | Voltage | 100 PPM/°C+30mV | 100 PPM/°C+30mV |
| | Current | 200 PPM/°C+60mA | 200 PPM/°C+60mA |
| Efficiency | | 76% | 76% |
| Remote Sense Compensation Voltage | | 3V | 3V |
| Command Response Time | | 10~600mS | 10~600mS |
| Power Factor | | 0.9 | 0.9 |
| Maximum Input Current | | 6A | 6A |
| Maximum Input Apparent Power | | 600VA | 600VA |
| Storage Tem. | | -10°C~70°C | -10°C~70°C |
| Protection | | OVP/OC/OTP | OVP/OC/OTP |
| Isolation (output to ground) | | 600V | 600V |

*This information is subject to change without notice.

Your Power Testing Solution

IT-M3100 Ultra-compact Wide Range DC Power Supply

Specification

| | | IT-M3120 | IT-M3121 |
|---|--|------------------------|------------------------|
| Rated Input Value (0℃~40℃) | Voltage | 0~20V | 0~30V |
| | Current | 0~100A | 0~70A |
| | Power | 850W | 850W |
| Load Regulation (% of Output+Offset) | Voltage | ≤0.01%+30mV | ≤0.01%+20mV |
| | Current | ≤0.1%+100mA | ≤0.1%+100mA |
| Power Regulation (% of Output+Offset) | Voltage | ≤0.01%+20mV | ≤0.01%+20mV |
| | Current | ≤0.1%+100mA | ≤0.1%+100mA |
| Setup Resolution | Voltage | 1mV | 10mV |
| | Current | 10mA | 10mA |
| Readback Resolution | Voltage | 1mV | 10mV |
| | Current | 10mA | 10mA |
| Setting Accuracy within 12 months 25°±5° ±(%of Output +Offset) | Voltage | ≤0.03%+20mV | ≤0.03%+20mV |
| | Current | ≤0.1%+100mA | ≤0.1%+70mA |
| Readback Accuracy within 12 months 25°±5° ±(%of Output +Offset) | Voltage | ≤0.03%+20mV | ≤0.03%+20mV |
| | Current | ≤0.1%+100mA | ≤0.1%+70mA |
| Ripple (20Hz ~20MHz) | Voltage | ≤80mVp-p | ≤80mVp-p |
| | Current | ≤100mA _{rms} | ≤70mA _{rms} |
| Setting Temperature Coefficient ± (PPM/℃ +Offset) | Voltage | 100 PPM/℃+20mV | 100 PPM/℃ +20mV |
| | Current | 200 PPM/℃+30mA | 200 PPM/℃ +30mA |
| Readback Temperature Coefficient ± (PPM/℃ +Offset) | Voltage | 100 PPM/℃+20mV | 100 PPM/℃ +20mV |
| | Current | 200 PPM/℃+30mA | 200 PPM/℃ +30mA |
| Rising Time (no load) | Voltage | ≤60mS | ≤80mS |
| Rising Time (CR full load) | Voltage | ≤150mS | ≤200mS |
| Falling Time (no load) | Voltage | ≤1S | ≤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) | 510.5*234*52.8 | | |
| Net. Weight | 5Kg | | |
| 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 (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃+10mV |
| | Current | 200 PPM/℃+50mA | 200 PPM/℃+50mA |
| Setup Stability-8h (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃+10mV |
| | Current | 200 PPM/℃+50mA | 200 PPM/℃+50mA |
| Readback Stability-30min (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃+10mV |
| | Current | 200 PPM/℃+70mA | 200 PPM/℃+70mA |
| Readback Stability-8h (PPM+Offset) | Voltage | 100 PPM/℃+10mV | 100 PPM/℃+10mV |
| | Current | 200 PPM/℃+70mA | 200 PPM/℃+70mA |
| Efficiency | 82% | | |
| Remote Sense Compensation Voltage | 3V | | |
| Command Response Time | 10~600mS | | |
| Power Factor | 0.98 | | |
| Maximum Input Current | 11A | | |
| Maximum Input Apparent Power | 1000VA | | |
| Storage Tem. | -10℃~70℃ | | |
| Protection | OVP/OC/OTP | | |
| Isolation (output to ground) | 500V | | |

*This information is subject to change without notice.

Your Power Testing Solution

IT-M3100 Ultra-compact Wide Range DC Power Supply

Specification

| | | IT-M3122 | IT-M3123 |
|---|--|------------------------|------------------------|
| Rated Input Value (0 C-40 C) | Voltage | 0~80V | 0~150V |
| | Current | 0~22A | 0~12A |
| | Power | 850W | 850W |
| Load Regulation (% of Output+Offset) | Voltage | ≤ 0.01%+40mV | ≤ 0.01%+100mV |
| | Current | ≤ 0.1%+20mA | ≤ 0.1%+20mA |
| Power Regulation (% of Output+Offset) | Voltage | ≤ 0.01%+40mV | ≤ 0.01%+40mV |
| | 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) | Voltage | ≤ 0.03%+40mV | ≤ 0.03%+75mV |
| | Current | ≤ 0.1%+30mA | ≤ 0.1%+10mA |
| Readback Accuracy within 12 months 25°±5° ±(%of Output +Offset) | Voltage | ≤ 0.03%+40mV | ≤ 0.03%+75mV |
| | Current | ≤ 0.1%+30mA | ≤ 0.1%+10mA |
| Ripple (20Hz -20MHz) | Voltage | ≤ 100mVp-p | ≤ 150mVp-p |
| | Current | ≤ 40mArms | ≤ 20mArms |
| Setting Temperature Coefficient ± (PPM/ C +Offset) | Voltage | 100 PPM/°C+20mV | 100 PPM/°C+20mV |
| | Current | 200 PPM/°C+30mA | 200 PPM/°C+30mA |
| Readback Temperature Coefficient ± (PPM/ C +Offset) | Voltage | 100 PPM/°C+20mV | 100 PPM/°C+20mV |
| | 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°C | | |
| Dimension (mm) | 510.5*234*52.8 | | |
| Net. Weight | 5Kg | | |
| 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 (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/°C+10mV |
| | Current | 200 PPM/°C+50mA | 200 PPM/°C+50mA |
| Setup Stability-8h (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/°C+10mV |
| | Current | 200 PPM/°C+50mA | 200 PPM/°C+50mA |
| Readback Stability-30min (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/°C+10mV |
| | Current | 200 PPM/°C+70mA | 200 PPM/°C+70mA |
| Readback Stability-8h (PPM+Offset) | Voltage | 100 PPM/°C+10mV | 100 PPM/°C+10mV |
| | Current | 200 PPM/°C+70mA | 200 PPM/°C+70mA |
| Efficiency | 82% | | |
| Remote Sense Compensation Voltage | 3V | | |
| Command Response Time | 10~600mS | | |
| Power Factor | 0.98 | | |
| Maximum Input Current | 11A | | |
| Maximum Input Apparent Power | 1000VA | | |
| Storage Tem. | -10°C~70°C | | |
| Protection | OVP/OC/OTP | | |
| Isolation (output to ground) | 500V | | |

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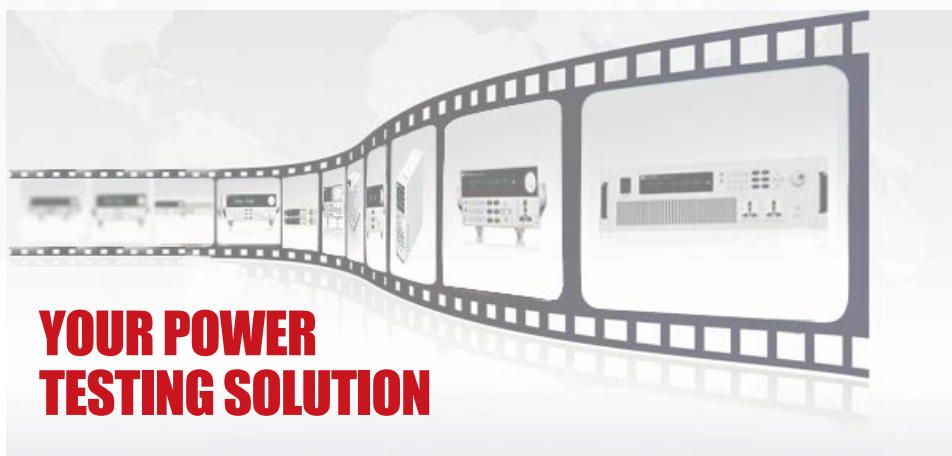
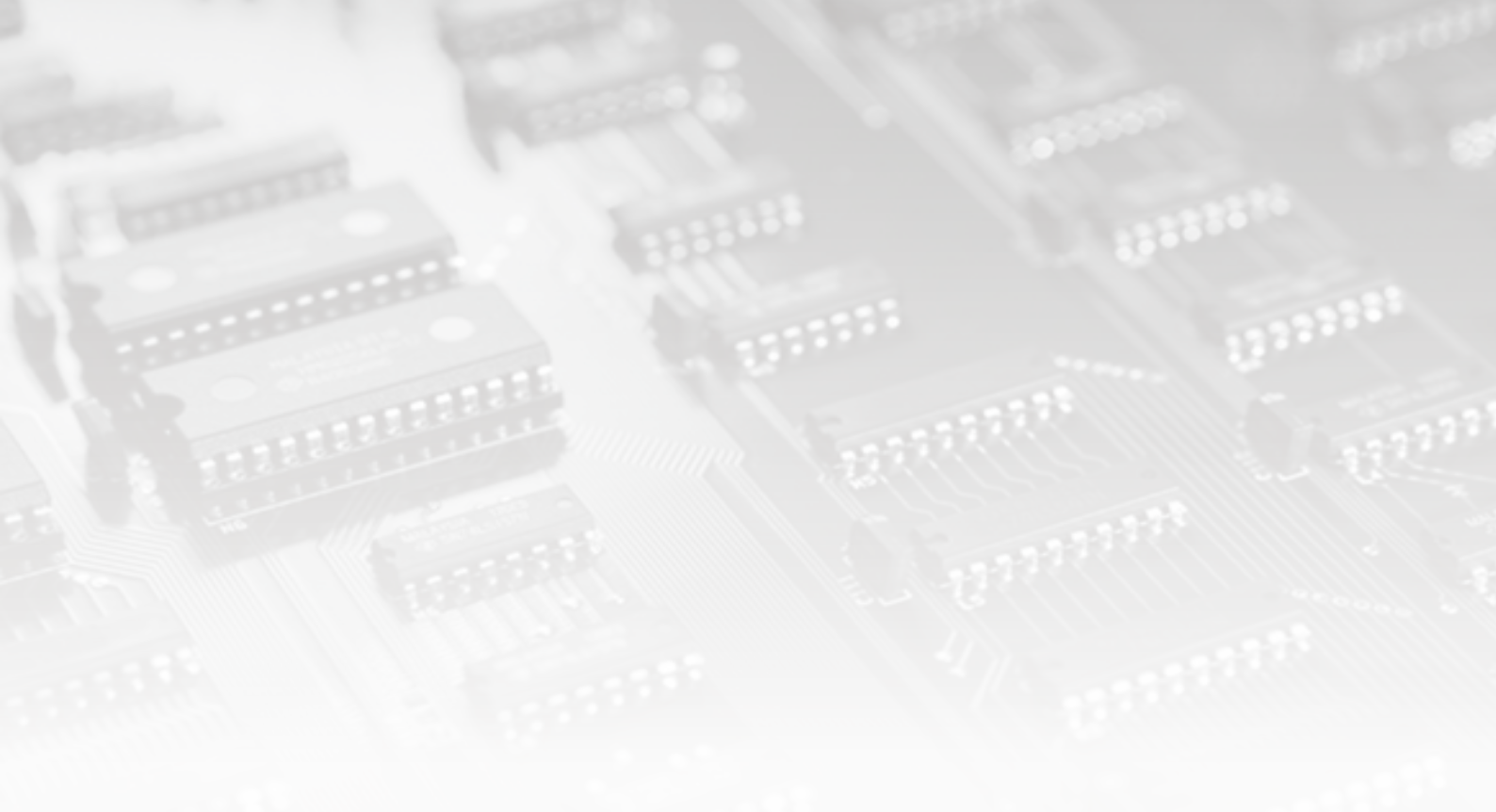
Your Power Testing Solution

IT-M3100 Ultra-compact Wide Range DC Power Supply

Specification

| | | IT-M3124 | IT-M3125 |
|---|--|------------------------|------------------------|
| Rated Input Value (0 ℃ -40 ℃) | Voltage | 0~300V | 0~600V |
| | Current | 0~6A | 0~3A |
| | Power | 850W | 850W |
| Load Regulation (%of Output+Offset) | Voltage | ≤0.01%+100mV | ≤0.01%+150mV |
| | Current | ≤0.1%+20mA | ≤0.1%+20mA |
| Power Regulation (%of Output+Offset) | Voltage | ≤0.01%+150mV | ≤0.01%+150mV |
| | 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) | Voltage | ≤0.03%+200mV | ≤0.03%+200mV |
| | Current | ≤0.1%+30mA | ≤0.1%+30mA |
| Readback Accuracy within 12 months 25°±5° ±(%of Output +Offset) | Voltage | ≤0.03%+200mV | ≤0.03%+200mV |
| | Current | ≤0.1%+30mA | ≤0.1%+30mA |
| Ripple (20Hz -20MHz) | Voltage | ≤300mVp-p | ≤600mVp-p |
| | Current | ≤50mA _{rms} | ≤30mA _{rms} |
| Setting Temperature Coefficient ± (PPM/ ℃ +Offset) | Voltage | 100 PPM/℃C+100mV | 100 PPM/℃C+100mV |
| | Current | 200 PPM/℃C+10mA | 200 PPM/℃C+10mA |
| Readback Temperature Coefficient ± (PPM/ ℃ +Offset) | Voltage | 100 PPM/℃C+100mV | 100 PPM/℃C+100mV |
| | 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) | 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) | 510.5*234*52.8 | | |
| Net. Weight | 5Kg | | |
| 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 (PPM+Offset) | Voltage | 100 PPM/℃C+30mV | 100 PPM/℃C+30mV |
| | Current | 200 PPM/℃C+60mA | 200 PPM/℃C+60mA |
| Setup Stability-8h (PPM+Offset) | Voltage | 100 PPM/℃C+30mV | 100 PPM/℃C+30mV |
| | Current | 200 PPM/℃C+60mA | 200 PPM/℃C+60mA |
| Readback Stability-30min (PPM+Offset) | Voltage | 100 PPM/℃C+30mV | 100 PPM/℃C+30mV |
| | Current | 200 PPM/℃C+60mA | 200 PPM/℃C+60mA |
| Readback Stability-8h (PPM+Offset) | Voltage | 100 PPM/℃C+30mV | 100 PPM/℃C+30mV |
| | Current | 200 PPM/℃C+60mA | 200 PPM/℃C+60mA |
| Efficiency | 82% | | |
| Remote Sense Compensation Voltage | 3V | | |
| Command Response Time | 10~600mS | | |
| Power Factor | 0.98 | | |
| Maximum Input Current | 11A | | |
| Maximum Input Apparent Power | 1000VA | | |
| Storage Tem. | -10℃~-70℃ | | |
| Protection | OVP/OCF/OTP | | |
| Isolation (output to ground) | 600V | | |

*This information is subject to change without notice.



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

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