ITECH

YOUR POWER TESTING SOLUTION

Product

IT-M7700 High Performance Programmable AC Power Supply

IT-M7721L/7722L
Programmable AC Power Supply

APPLICATIONS

- Energy
- Industrial Electronics
- ATS
- Home Appliance
- IEC Conformity Test

Your Power Testing Solution

IT-M7721L/7722L Programmable AC Power Supply

ITECH newly-launched IT-M7721L/7722L High Performance Programmable AC Power Supply combines intelligence and flexibility, breaks through the huge defects of the traditional AC power source, reduces the size to only 1U Half-Rack, maximizes space utilization. Built-in power meter and arbitrary waveform generator make it convenient to simulate various arbitrary waveform outputs. IT-M7721L/7722L is designed with advanced technologies of programmable AC and DC power supplies, and can be widely used in multiple fields such as power energy products, home appliances, industrial electronics and IEC standards testing.

Features

- 1U Half-Rack compact design, increased space utilization
- AC, DC, AC + DC output modes, DC voltage offset simulation in AC + DC mode
- Built-in AC power meter with powerful functions
- Settable output waveform start/stop phase angle
- Optional interfaces include RS232, CAN, LAN, GPIB, USB_TMC,USB_VCP, external analog, IO. Flexible and cost effective

Model	Power(AC/DC)	Voltage	Current	Frequency	Volume
IT-M7721L	300 VA/300 W	300 V	3 A	45~100 Hz	1U Half-Rack
IT-M7722L	600 VA/600 W	300 V	6 A	45~100 Hz	1U Half-Rack

APPLICATIONS

RD, verification and testing of the small-size power supply production

Communications/Telecommunications

AC power simulation

Manufacturing and process control

Battery or LCD applications

ATE testing

1U Half-Rack 4.5kg

AC/DC AC+DC

Built-in Power meter

1U Half-Rack Mini size

The conventional AC power supplies are much bigger and heavier, difficult to move. The size of IT-M7721L/7722L is only 1U Half-Rack, but its max. power is up to 600VA. Its weight is 4.5kg only. With such high-power density design, the space is better utilized. So it can be portable, convenient for bench testing and good for system building.

Conventional switching AC power supplies
>10kg

VS

IT-M7721L/7722L
1U Half-Rack, 4.5kg

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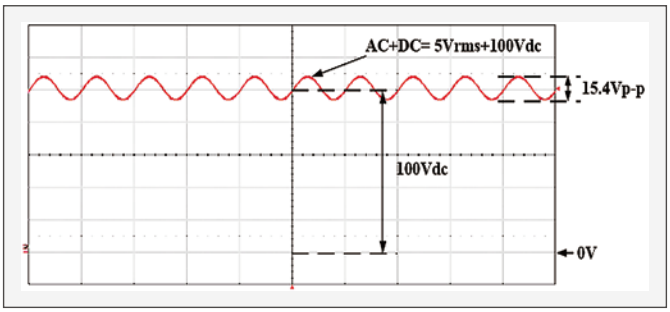
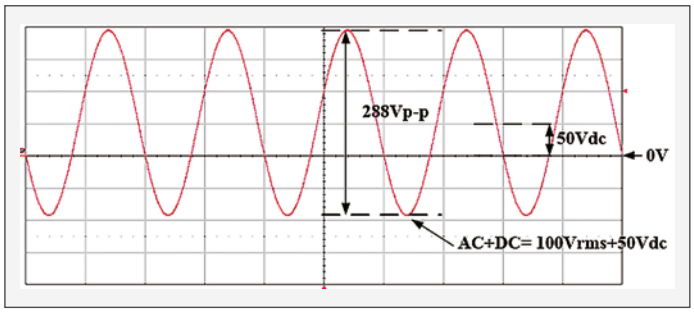
IT-M7721L/7722L Programmable AC Power Supply

Multiple output modes: AC, DC, AC+DC

The output modes of IT-M7721L/7722L series include AC, DC, AC+DC. It can not only provide pure AC or DC output but also AC+DC output mode which can expand application fields and test DC offset element.

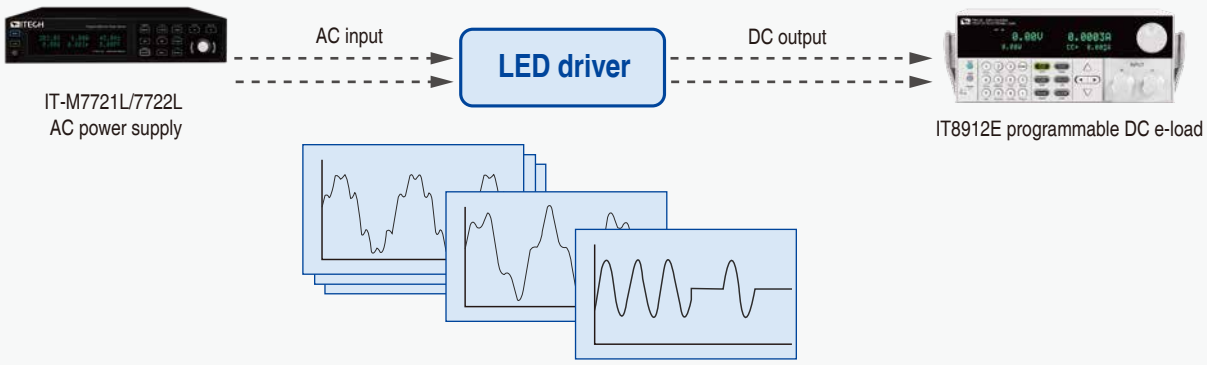




Output waveform start/stop phase angle is settable

IT-M7721L/7722L supports the initial phase and stop phase of the output waveform settable to meet different test requirements. The initial phase and stop phase are set in the range of 0-360°. By adjusting the phase angle, the user can test the rush current of the product at different positions which is widely applied to various switch current impulse tests and various rectifiers test.

Application: LED driver, household appliances and other products input surge current and power supply disturbance performance verification



Built-in AC power meter

IT-M7721L/7722L provides built-in AC power meter which can accurately measure and display 12 parameters on the screen, including rms voltage, rms current , output frequency, active power, power factor, etc. No need for additional power meter. So it can not only reduce test cost but also get rid of the complex connection operation.

Comprehensive protection

IT-M7721L/7722L provides comprehensive protection , including OVP rms, OVP peak, UVP rms, OCP rms, OCP peak, OCP delay, OPP, OTP and smart fan dysfunctional protection.

Application case

When testing a capacitive load with an AC power supply, the voltage will suddenly drop due to high current impulse, which will lead to failure load. At the same time, excessive surge current will easily cause damage to the AC power supply. Therefore, comprehensive protection is essential for the AC power supply. The picture on the right shows the voltage and current curves of the incandescent bulb tested by the IT-M7721L/7722L .

Panel operation and remote control

The users can operate easily on the IT-M7721L/7722L front panel ; They also come with optional USB,GPIB,LAN and RS-232 interfaces, and an analog interface is also available to support remote control and ATE system quick integration. Supporting LXI and SCPI protocol, the user can remotely control the unit via web-server for convenient control and monitoring.

Pictures	Model	Interface
	IT-E1205	GPIB
	IT-E1206	USB/LAN
	IT-E1207	RS–232/CAN
	IT-E1208	Analog
	IT-E1209	USB
	IT-E251	Connection Cable

*IT-E251 is standard accessary for three phase installation and serial connection.

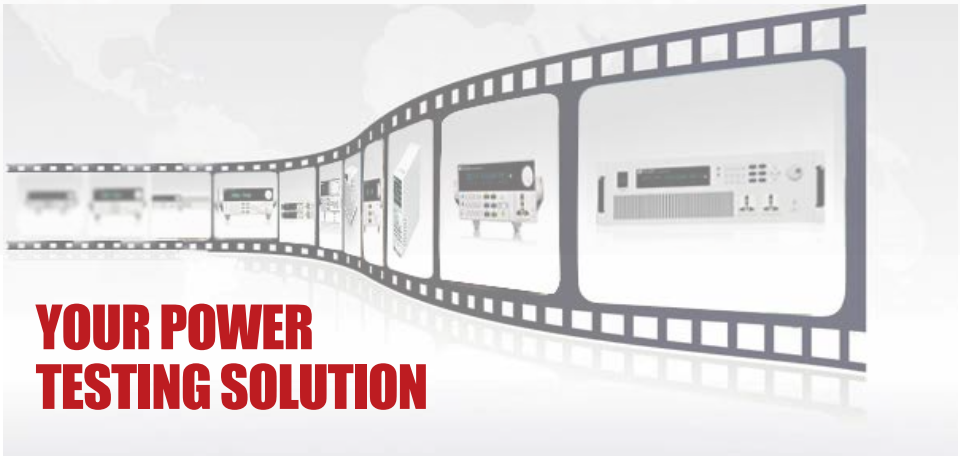
Rear panel with optional interfaces

Your Power Testing Solution

IT-M7721L/7722L Programmable AC Power Supply

		IT-M7721L	IT-M7722L
AC Input			
Voltage		100~240Vac	100~240Vac
Phase		Single-phase	Single-phase
Frequency		47~63Hz	47-63Hz
Max.Current		4.3A	8.5A
Power Factor		0.99(Typical)	0.99(Typical)
AC Output			
Max. Output Power		300VA	600VA
Max. Output Voltage		300Vac	300Vac
Output Phase		Single-phase	Single-phase
Current Range(Rms)		3A	6A
Current Range(peak)		9A	18A
Output Frequency Range		45~100Hz	45~100Hz
Phase Angle Degree Range		0 ~ 359.9°	0 ~ 359.9°
THD*1*3		≤0.3% at 45~100Hz	≤0.3% at 45~100Hz
Crest Factor		3	3
Line Regulation*3		≤0.06%	≤0.06%
Load Regulation*3		≤0.15%	≤0.15%
Output Voltage(Vac)	Resolution	0.1V	0.1V
	Accuracy	±(0.2%+0.2% F.S.)	±(0.2%+0.2% F.S.)
Frequency	Resolution	0.1 Hz	0.1 Hz
	Accuracy	±0.1%	±0.1%
Phase Angle Degree Range	Resolution	0.1°	0.1°
	Accuracy	0.5°	0.5°
DC Offset Value		20mVdc	20mVdc
Efficiency		75% (Typical)	80% (Typical)
DC Output			
Max. output power		300W	600W
Max. output voltage		±400Vdc	±400Vdc
Maximum output current (Rms)		±3A	±6A
DC voltage(Vdc)	Accuracy	±(0.2%+0.2% F.S.)	±(0.2%+0.2% F.S.)
Dynamic Response Time (Full load of 10~90%)		≤0.5ms	≤0.5ms
Meter			
AC Voltage(Vac)	Range	0~300V	0~300V
	Resolution	0.1V	0.1V
	Accuracy	±(0.25%+0.25% F.S.)	±(0.25%+0.25% F.S.)
AC current (Rms)	Range	0.1~3A	0.1~6A
	Resolution	10mA	10mA
	Accuracy	±(0.5%+0.5% F.S.)	±(0.25%+0.25% F.S.)
AC current (Peak)	Range	0 ~ 4.25A	0～8.5A
	Resolution	10mA	10mA
	Accuracy	±(0.4%+0.8% F.S.)	±(0.4%+0.8% F.S.)
DC voltage	Accuracy	±(0.25%+0.25% F.S.)	±(0.25%+0.25% F.S.)
DC current	Accuracy	±(0.25%+0.355% F.S.)	±(0.25%+0.355% F.S.)
Frequency	Range	45 ~100Hz	45 ~100Hz
	Resolution*4	0.1 Hz	0.1 Hz
	Accuracy*2	±0.1%	±0.1%
Power (S)	Resolution	100mVA	100mVA
	Accuracy	±(0.5%+0.5% F.S.)	±(0.5%+0.5% F.S.)
Other			
Dimension (WxHxD)		215 x 44.45(1U) x 450 mm	215 x 44.45(1U) x 450 mm
Weight		5KG	5KG

*1 Min voltage for THD test is 100Vac.
*2 Min voltage for frequency display accuracy is 100Vac.
*3 Tested with pure resistive load.
*4 The applicable range of frequency resolution is 45~99.9Hz.



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

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