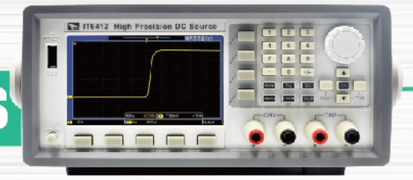
ITECH

IT6412 Specifications



Parameters		CH1		CH2	
Output Rating (0°C - 40 °C)	Voltage	±15V	±9V	0-15V	0-9V
	Current	±3A	±5A	±3A	±5A
	Power	45W			
Load Regulation ±(%of Output+Offset)	Voltage	≤0.01%+2mV			
	Current	≤0.05%+1mA			
Line Regulation ±(%of Output+Offset)	Voltage	≤0.02%+2mV			
	Current	≤0.05%+1mA			
Setup Resolution	Voltage	1mV			
	Current	0.1mA			
	OVP	10 mV			
Readback Resolution	Voltage	1mV			
	Current	5A Range	1mA		
		5mA Range	100nA		
Setup Accuracy (12-month validity, 25°C±5°C) ±(%of Output+Offset)	Voltage	≤0.02%+2mV			
	Current	≤0.05%+2mA			
	OVP	0.5V			
Readback Accuracy (12- month validity, 25°C±5°C) ±(%of Output+Offset)	Voltage	≤0.02%+2mV			
	Current	5A Range	≤0.05%+2mA		
		5mA Range	≤0.05%+2uA		
Ripple (20Hz -20MHz)	Voltage	≤ 3mVp-p/1 mVrms			
	Current	≤1mArms			
Setup Temperature drift coefficient (%of Output/°C+Offset)	Voltage	0.01%+0.2mV			
	Current	0.01%+0.2mA			
	OVP	0.1%+50 mV			
Readback Temperature drift coefficient (%of Output/°C+Offset)	Voltage	0.01%+0.2mV			
	Current	5A Range	0.015%+0.1mA		
		5mA Range	0.01%+2uA		
Rising Time(no load)	Voltage	≤500uS			
Rising Time(full load)	Voltage	≤500uS			
Falling Time(no load)	Voltage	≤5mS			
Falling Time(full load)	Voltage	≤500uS			
Transient ResponseTime	50%-100% LOAD recover to 50 mV ≤50uS				
AC Input	Voltage1	110V±10%			
	Voltage2	220V±10%			

AC Input	Frequency	47Hz-63Hz
Setup Stablity-30min (%of Output +Offset)	Voltage	0.01%+1mV
	Current	0.01%+1mA
Setup Stablity-8h (%of Output +Offset)	Voltage	0.01%+1.5mV
	Current	0.01%+1.5mA
Readback Stablity-30min (%of Output +Offset)	Voltage	0.01%+1mV
	Current	0.01%+1mA
Readback Stablity-8h (%of Output +Offset)	Voltage	0.01%+1.5mV
	Current	0.01%+1.5mA
Fuse Spec	Voltage1	5A
	Voltage2	2.5A
Sense Voltage	1V	
Programming Response Time(Typical)	5mS	
Power Factor	0.7 Max	
Max.Input Current	5A	
Max.Input Apparent Power	500VA	
Storage Temperature	-10°C~70°C	
Protection Function	OVP/OCP/OTP	
Communication Interface	GPIB/USB/LAN	
withstand voltage (output to ground)	200Vdc	
Working Temperature	0~40°C	
Dimension (mm)	226mmW*88.2mmH*476.26mmD	
Weight (net weight)	9Kg	
DVM		
Measuring Range	-20V~+20V	
Readback Accuracy	0.02%+2mV	
Readback Resolution	1mV	
Readback Temperature drift coefficient (%of Intput/°C+Offset)	0.02%+1mV	
Readback Stablity-30min (%of Output +Offset)	0.02%+1mV	
Readback Stablity-8 h (%of Output +Offset)	0.02%+1 mV	
Input common-mode voltage	<50Vdc	
Input Impedance	4.5MΩ	

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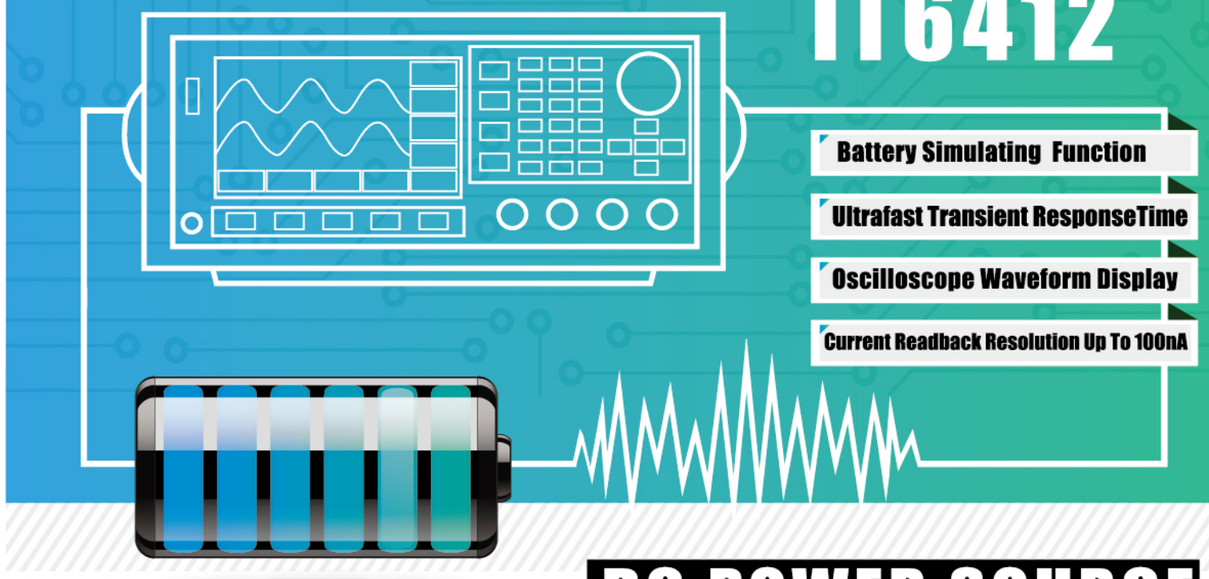
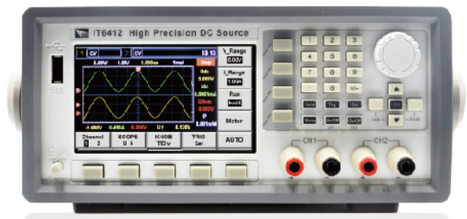


IT6412

- Battery Simulating Function
- Ultrafast Transient ResponseTime
- Oscilloscope Waveform Display
- Current Readback Resolution Up To 100nA

DC POWER SOURCE
DUAL-CHANNEL BIPOLAR BATTERY/CHARGER SIMULATOR



ITECH Website

IT6412 DC POWER SOURCE

DUAL-CHANNEL BIPOLAR BATTERY/CHARGER SIMULATOR

IT6412 unique bipolar voltage/current output can be used as a bipolar power supply or a bipolar electronic load. The battery simulating function is especially applicable for development and high speed production testing of portable,battery-powered products,such as smartphones and wireless chipsets,bluetooth headsets,tablet computers,digital cameras,GPS receivers,RFIC power amplifiers,and intelligent wearable devices,etc. Ultrafast transient time less than 50uS and new designed speed shift mode achieves voltage/current high speed rising waveform without overshoot. Meanwhile, IT6412 has the function of waveform display,let the test be visible and simple.

1 Features

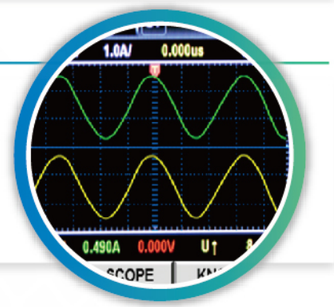
- Dual Channel,Bipolar,Dual Range output
- Accurate Battery Simulation
- Oscilloscope waveform display (DSO)
- Dual-channel display on high performance colorful LCD screen
- Ultrafast transient response < 50uS
- Ultrafast Voltage rising time up to 500uS (full load)
- Current readback resolution up to 100nA(0.1uA)
- Built-in high accuracy DVM(5 1/2 digit)
- Variable output impedance(0-1Ω)
- Applicable to portable battery-operated products test
- LED test no overshoot current
- Relay Out function achieves electrical isolation on terminals
- List function achieves voltage/current output as programmed
- Standard communication interfaces LAN/USB/GPIB

2 Dual-Channel/Bipolar/Dual-Range Output

As a dual-channel bipolar high speed linear DC source, IT6412 is available for easy-shifting dual range output with each channel. With max. ±15V voltage and ±5A current output, IT6412 can achieve testing for mobile phone and charger independently. IT6412 is multifunctional and of high performance, making diversified testing requests available.

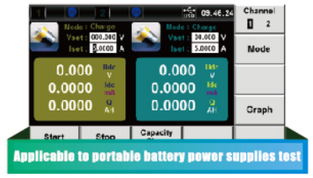
3 Oscilloscope Waveform Display Function

IT6412 provides waveform display function based on sample data. The voltage/current waveform is visible or invisible by your option, and can be adjusted by the knob. The graphic on the newly designed colorful display can be saved, achieving easy and effective oscilloscope experience.



4 Battery Simulating Function

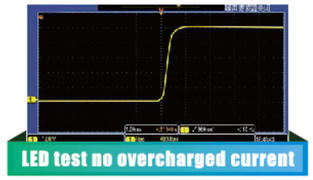
With the unique current bipolar design and 0~1Ω variable output impedance, IT6412 is applicable to types of portable battery charge-discharge tests. Simulating the battery charge-discharge features and assisting with other tests are also reliable. One equipment, diversified applications.



Applicable to portable battery power supplies test

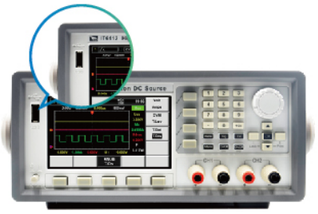
5 Ultrafast Transient Response Time, <50uS

IT6412 is with ultrafast transient response ability, the transient response time for recovering to 50mV is less than 50uS when 50%-100% loaded. New designed speed shift mode achieving voltage/current high speed rising waveform without overshoot, supports stable power supply, and ensures the security, especially for LED test.


LED test no overcharged current

6 Screenshots Function

IT6412 provides screenshots function to facilitate customer data analysis. Press screenshots on the front panel, the display graphic will be saved in inserted USB storage disk, easy for your reanalysis on data and waveform. The USB interface on front panel makes the data saving in time and easy.



7 DVM Test Function

Abundant electrical basic measuring functions are available on IT6412. High accuracy DVM is built in each channel with readback resolution up to 1mV and measure range ±20V. The measured data will be visible on specified channel screen. The changes of voltage waveform measured by DVM can be observed by oscilloscope display function.

Application

- Portable battery-powered device test
- Battery protection board test
- Battery test
- LED test
- Power amplifier test
- DC / DC converter test