

IT6500 wide-range programmable DC power supply

IT6500 series power supply is single output high-powered and programmable DC power supply which support CC mode and CV mode. The 1200W model has 1U ultrathin body with 1mV, 1mA resolution; the 3000W model outputs adjustable voltage/current value within 80V/120A. In the meanwhile, some models equipped with DIN40839 and ISO-16750-2 standard waveforms. IT6500 provide you with multiple proposal to meet your test demands

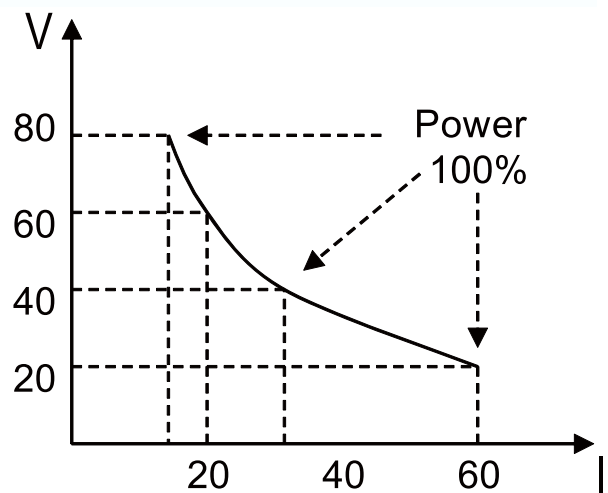


■ Feature

- VFD display
- Achieve Max. voltage/current within rated power
- High resolution of 1mV, 1mA
- Low noise and ripple, comparable with linear power supply
- Some models equipped with DIN40839 and ISO-16750-2 standard waveforms
- Compact, high density, rack mount size
- Built-in USB/RS232/RS485/GPIB communication interface
- Master-Slave mode for parallel and series operation
- With standard SCPI communication protocol analog control interface
- Remote sensing function
- Intelligent cooling fans to save energy and reduce noise
- List mode

Mode	Voltage	Current	Power
IT6502D	80V	60A	800W
IT6512	80V	60A	1200W
IT6512A	80V	60A	1200W
IT6513	150V	30A	1200W
IT6513A	150V	30A	1200W
IT6512D	80V	120A	1600W
IT6522A	80V	120A	3000W
IT6523D	160V	120A	3000W
IT6533A	160V	120A	6000W
IT6532A	80V	240A	6000W

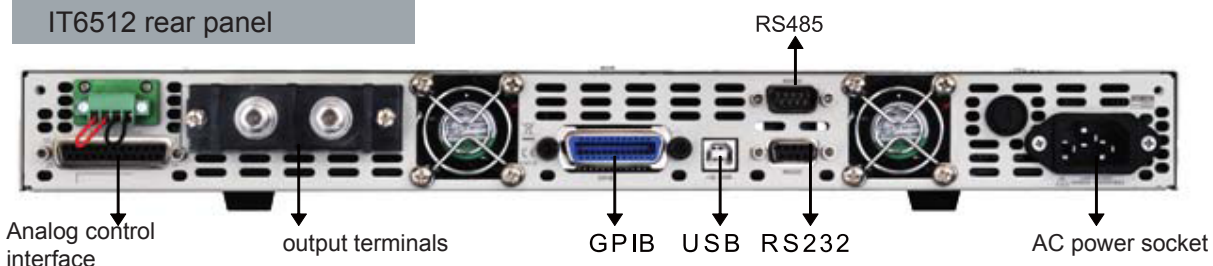
*IT6500A series (D series) doesn't include DIN waveform and List mode



IT6512 I-V curve graph

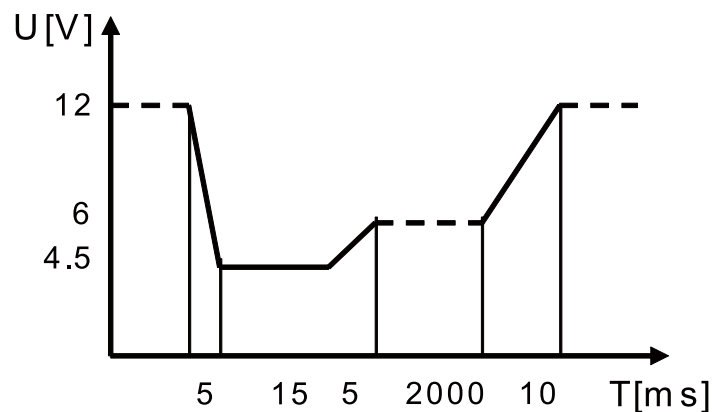
IT6500 series power supply has applied Auto-range technology. It allows any combination of the rated voltage and current up to the maximum output power of 1200W. For example, the max current output at 20V is 60A.

IT6512 rear panel

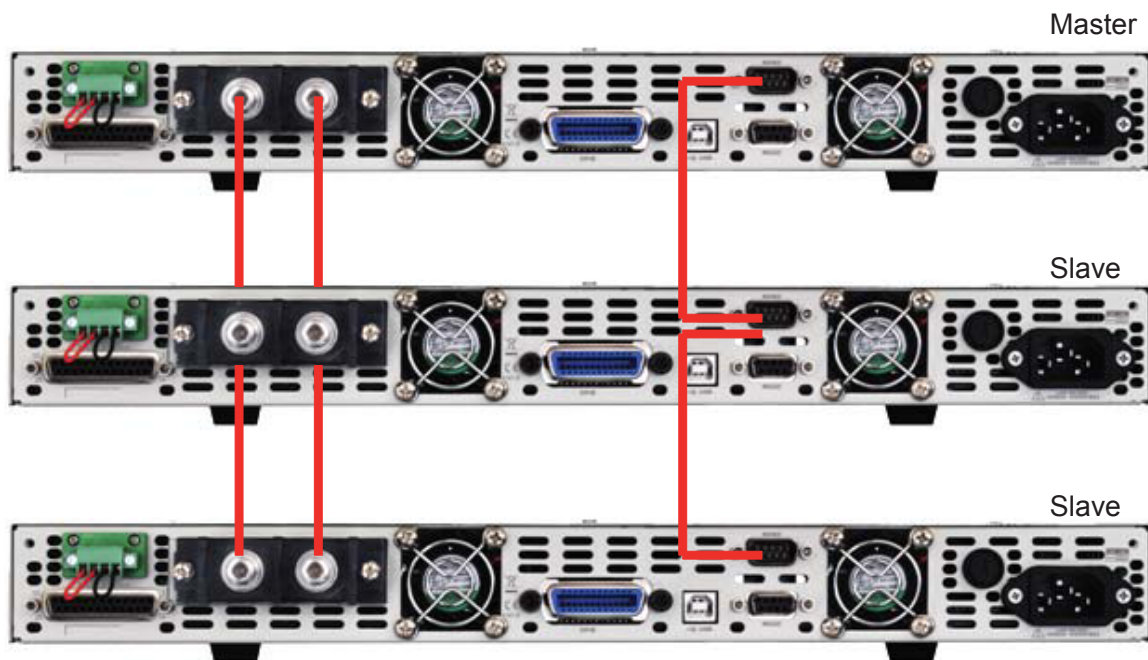


Integrated voltage sequence according to DIN 40839

Some models of IT6500 series integrate voltage (12V/24V) sequence according to DIN40839. It can simulate the start waveform of engine. Under List mode, user could customize the output voltage sequence base on testing demands, such as, rising/falling slope. This is a high-performance source that can be used in many fields.



Support Master-Slave Operation



Using the RS-485 interface, the power supplies can operate in Master-Slave mode. In this mode, the Master unit can control all other power supplies connected in parallel or series. Additionally, the RS-485 interface can be used for multi-unit control of up to 31 daisy chained units.

IT6500 Specifications

Parameters		IT6502D	IT6512	IT6512A	IT6513	IT6513A
Input rating	voltage	0~80V	0~80V	0~80V	0~150V	0~150V
	current	0~60A	0~60A	0~60A	0~30A	0~30A
	power	0~800W	0~1200W	0~1200W	0~1200W	0~1200W
Load Regulation	voltage		≤0.01%+8mV		≤0.05%+30mV	
	current		≤0.1%+10mA		≤0.1%+30mA	
Line Regulation	voltage		≤0.02%+2mV		≤0.02%+20mV	
	current		≤0.02%+2mA		≤0.02%+10mA	
Setup Resolution	voltage		1mV		3mV	
	current		1mA		1mA	
Readback Resolution	voltage		1mV		3mV	
	current		1mA		1mA	
Setup Accuracy	voltage		≤0.02%+30mV		≤0.05%+30mV	
	current		≤0.1%+0.1%FS		≤0.2%+0.1%FS	
Readback Accuracy	voltage		≤0.02%+30mV		≤0.05%+30mV	
	current		≤0.1%+0.1%FS		≤0.2%+0.1%FS	
Ripple	V _{pp}		≤30mVp-p		≤60mVp-p	
	I _{rms}		≤20mA _{rms}		≤40mA _{rms}	
Temp.coefficient	voltage		≤0.02%+30mV		≤0.02%+30mV	
	current		≤0.05%+10mA		≤0.05%+10mA	
dimension	W*H*D	415mmW*44mmH*500mmD			415mmW*44mmH*500mmD	
weight	Kg	8.5Kg			8.5Kg	

Parameters		IT6512D	IT6522A	IT6523D	IT6533A	IT6532A
Input rating	voltage	0~80V	0~80V	0~160V	0~160V	0~80V
	current	0~120A	0~120A	0~120A	0~120A	0~240A
	power	0~1600W	0~3000W	0~3000W	0~6000W	0~6000W
Load Regulation	voltage	≤0.05%+30mV		≤0.05%+40mV		≤0.05%+40mV
	current	≤0.1%+30mA		≤0.1%+40mA		≤0.1%+60mA
Line Regulation	voltage	≤0.02%+20mV		≤0.02%+20mV		≤0.02%+20mV
	current	≤0.02%+10mA		≤0.02%+20mA		≤0.02%+30mA
Setup Resolution	voltage	2mV		4mV		2mV
	current	3mA		3mA		6mA
Readback Resolution	voltage	2mV		4mV		2mV
	current	3mA		3mA		6mA
Setup Accuracy	voltage	≤0.05%+30mV		≤0.05%+40mV		≤0.05%+40mV
	current	≤0.2%+0.1%FS		≤0.2%+0.1%FS		≤0.2%+0.1%FS
Readback Accuracy	voltage	≤0.05%+30mV		≤0.05%+40mV		≤0.05%+40mV
	current	≤0.2%+0.1%FS		≤0.2%+0.1%FS		≤0.2%+0.1%FS
Ripple	V _{pp}	≤80mVp-p		≤150mVp-p		≤100mVp-p
	I _{rms}	≤120mA _{rms}		≤120mA _{rms}		≤240mA _{rms}
Temp.coefficient	voltage	≤0.02%+30mV		≤0.02%+40mV		≤0.02%+40mV
	current	≤0.05%+10mA		≤0.05%+20mA		≤0.05%+20mA
dimension	W*H*D	439mmW×90mmH×534mmD		439mmW×180mmH×534mmD		439mmW×180mmH×534mmD
weight	Kg	17Kg		34Kg		34Kg

*IT6500A series (Dseries) doesn't include DIN waveform or List mode

Built-in multiple communication interfaces

Compared to other series DC source of ITECH, IT6500 series has built-in RS485 interface. This is very useful when have long-distance (Max. 1000m) and multiple nodes communication demands. The node number is up to 31. In addition, built-in GPIB interface is needed adopted parallel connection; communication speed is up to 20ms. Besides, RS232 and USB common communication interface are also included.

External Analog Control Interface

The power supply output voltage and current can be controlled from zero to full range by either external DC voltage sources (0-5V or 0-10V) or resistances (0-5k or 0-10k). The DB25 analog control interface also provides a source for monitoring the voltage and current output.