

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.

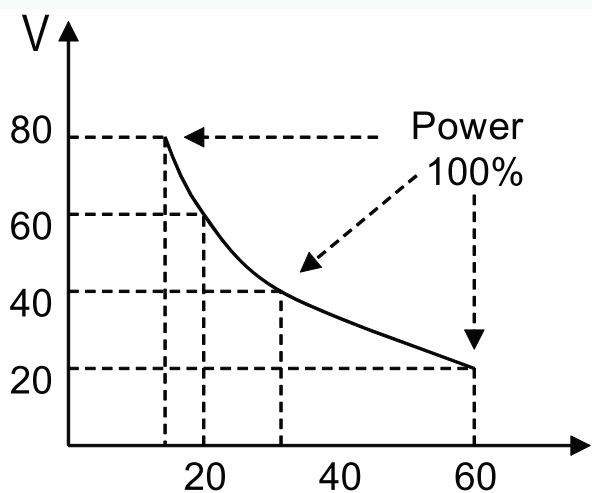
NEW


■ Feature

- VFD display
- Achieve Max. voltage/current within rated power
- High resolution with 1mV, 1mA
- Low noise and ripple, comparable with linear power supply
- Some models equipped with DIN40839 and ISO-16750-2 standard waveforms
- Compact size, 1200W has 1U size
- Built-in USB/RS232/RS485/GPIB communication interface
- Support parallel/series connection to extend current/voltage/power
- With standard SCPI communication protocol
- Analog control interface
- Remote sensing function
- Intelligent cooling fans to save energy and reduce noise

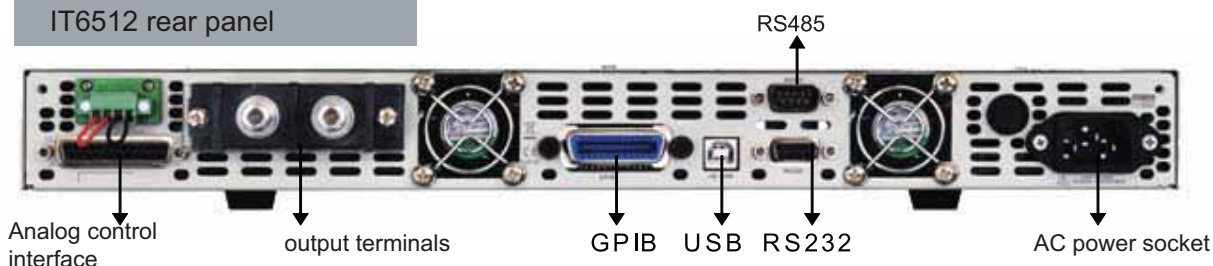
Mode	Voltage	Current	Power
IT6502D	80V	60A	800W
IT6512	80V	60A	1200W
IT6512A	80V	60A	1200W
IT6513	150V	30A	1200W
IT6513A	150V	30A	1200W
IT6512D	80V	120A	1600W
IT6522A	80V	120A	3000W
IT6523D	160V	120A	3000W
IT6533A	160V	120A	6000W
IT6532A	80V	240A	6000W

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



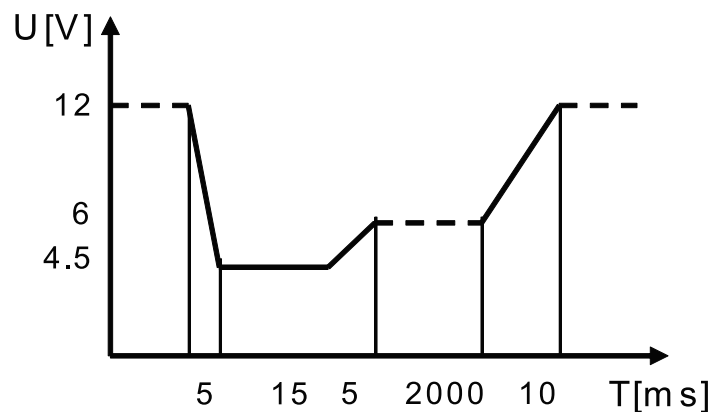
IT6500 series power supply has applied Auto-range technology. Means it can output the Max. voltage or current with a fixed power. For example, IT6512 can be used as 80V/15A or 20V/60A units. Save customer's cost.

IT6512 rear panel

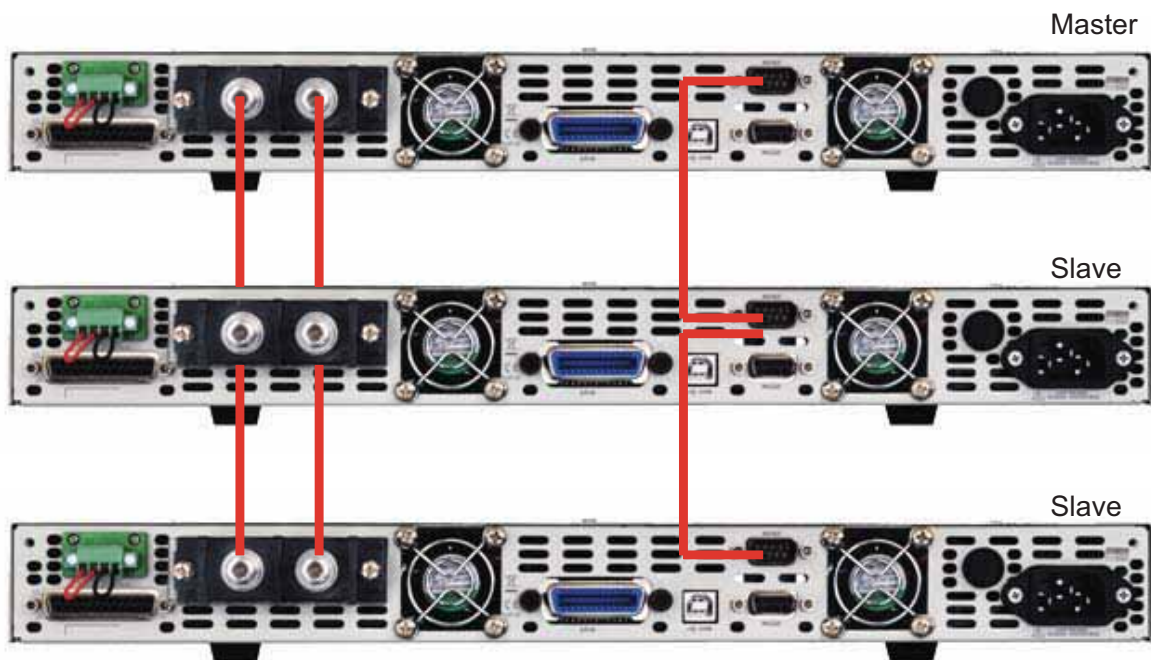


Integrated voltage sequence according to DIN 40839

Some models of IT6500 series integrate voltage (12V/24V) sequence according to DIN40839 to recall easily. 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 connection mode



Above is a schematic illustration of Master-Slave connection for IT6512. When connect several units in parallel or series, user could specify one unit as a Master and the others as slaves. All setting operations can be directly finished through Master when communicated with PC via GPIB/USB/RS232 interfaces. And slaves only display SLAVE.

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	$\leq 0.01\% + 8\text{mV}$				$\leq 0.05\% + 30\text{mV}$
	current	$\leq 0.1\% + 10\text{mA}$				$\leq 0.1\% + 30\text{mA}$
Line Regulation	voltage	$\leq 0.02\% + 2\text{mV}$				$\leq 0.02\% + 20\text{mV}$
	current	$\leq 0.02\% + 2\text{mA}$				$\leq 0.02\% + 10\text{mA}$
Setup Resolution	voltage	1mV				3mV
	current	1mA				1mA
Readback Resolution	voltage	1mV				3mV
	current	1mA				1mA
Setup Accuracy	voltage	$\leq 0.02\% + 30\text{mV}$				$\leq 0.05\% + 30\text{mV}$
	current	$\leq 0.1\% + 0.1\% \text{FS}$				$\leq 0.2\% + 0.1\% \text{FS}$
Readback Accuracy	voltage	$\leq 0.02\% + 30\text{mV}$				$\leq 0.05\% + 30\text{mV}$
	current	$\leq 0.1\% + 0.1\% \text{FS}$				$\leq 0.2\% + 0.1\% \text{FS}$
Ripple	V _{pp}	$\leq 30\text{mVp-p}$				$\leq 60\text{mVp-p}$
	I _{rms}	$\leq 20\text{mA}_{\text{rms}}$				$\leq 40\text{mA}_{\text{rms}}$
Temp.coefficient	voltage	$\leq 0.02\% + 30\text{mV}$				$\leq 0.02\% + 30\text{mV}$
	current	$\leq 0.05\% + 10\text{mA}$				$\leq 0.05\% + 10\text{mA}$
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	$\leq 0.05\% + 30\text{mV}$		$\leq 0.05\% + 40\text{mV}$		$\leq 0.05\% + 40\text{mV}$
	current	$\leq 0.1\% + 30\text{mA}$		$\leq 0.1\% + 40\text{mA}$		$\leq 0.1\% + 60\text{mA}$
Line Regulation	voltage	$\leq 0.02\% + 20\text{mV}$		$\leq 0.02\% + 20\text{mV}$		$\leq 0.02\% + 20\text{mV}$
	current	$\leq 0.02\% + 10\text{mA}$		$\leq 0.02\% + 20\text{mA}$		$\leq 0.02\% + 30\text{mA}$
Setup Resolution	voltage	2mV		4mV		2mV
	current	3mA		3mA		6mA
Readback Resolution	voltage	2mV		4mV		2mV
	current	3mA		3mA		6mA
Setup Accuracy	voltage	$\leq 0.05\% + 30\text{mV}$		$\leq 0.05\% + 40\text{mV}$		$\leq 0.05\% + 40\text{mV}$
	current	$\leq 0.2\% + 0.1\% \text{FS}$		$\leq 0.2\% + 0.1\% \text{FS}$		$\leq 0.2\% + 0.1\% \text{FS}$
Readback Accuracy	voltage	$\leq 0.05\% + 30\text{mV}$		$\leq 0.05\% + 40\text{mV}$		$\leq 0.05\% + 40\text{mV}$
	current	$\leq 0.2\% + 0.1\% \text{FS}$		$\leq 0.2\% + 0.1\% \text{FS}$		$\leq 0.2\% + 0.1\% \text{FS}$
Ripple	V _{pp}	$\leq 80\text{mVp-p}$		$\leq 150\text{mVp-p}$		$\leq 100\text{mVp-p}$
	I _{rms}	$\leq 120\text{mA}_{\text{rms}}$		$\leq 120\text{mA}_{\text{rms}}$		$\leq 240\text{mA}_{\text{rms}}$
Temp.coefficient	voltage	$\leq 0.02\% + 30\text{mV}$		$\leq 0.02\% + 40\text{mV}$		$\leq 0.02\% + 40\text{mV}$
	current	$\leq 0.05\% + 10\text{mA}$		$\leq 0.05\% + 20\text{mA}$		$\leq 0.05\% + 20\text{mA}$
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.

Analog control interface

IT6500 series provided analog control interface. It supports either 10V/5V voltage or 10K/5K resistor to program settings. Users can use 0~10V or 0~5V analog voltage to control 0~100% voltage and current; analog control interface has been widely used in the application of production.