

IT-N6300

Triple-Channel DC Power Supply



Your Power Testing Solution

IT-N6300 Series

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The IT-N6300 Series is a high-performance triple-output DC power supply from ITECH, housed in a compact 2U half-rack chassis. Each channel operates independently, with series/parallel and synchronization capabilities for versatile testing needs. A 4.3-inch high-resolution LCD offers intuitive control for parameter setting, test programming, and waveform monitoring. High-resolution output (1 mV/0.1 mA) ensures precise voltage and current delivery.

With low ripple, CC/CV priority modes, and FOLDBACK protection, the IT-N6300 ensures stable and safe operation. Flexible control options, including panel and remote programming, simplify system integration. Ideal for labs, manufacturing, and communications testing, the IT-N6300 combines precision, reliability, and efficiency for advanced power management.

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APPLICATIONS



Features

- 4.3-inch Color LCD Display
- Fully Isolated Triple Channels with Independent Control
- Multiple Output Modes: Series, Parallel, and Synchronous
- Auto Range Mode for Versatile Testing Needs
- Transient Response Time: $\leq 50 \mu\text{s}$
- High Accuracy: $\leq 0.02\% + 3 \text{ mV}$ / $\leq 0.03\% + 1.5 \text{ mA}$
- Programming Response Time: 5 ms
- Low Output Ripple and Noise
- CC/CV Priority Modes
- Comprehensive Protection Features: OVP, UVP, OCP, UCP, OPP, OTP, and FOLDBACK
- Supports Local and Remote Sensing Modes
- Built-in USB, LAN, Digital I/O, and RS232 Communication Interfaces (on Select Models)

Product model	Channels	Total Power	CH1 & CH2	CH3	Setup Resolution	Interface	Silicone Protective Case
IT-N6322A	3	245W	32V/6A/100W	9V/5A/45W	10mV/1mA	USB	Optional
IT-N6322B	3	245W	32V/6A/100W	15V/5A/45W	1mV/0.1mA	USB/LAN/RS232/Digital I/O	Standard
IT-N6323A	3	245W	60V/3A/100W	9V/5A/45W	10mV/1mA	USB	Optional
IT-N6323B	3	245W	60V/3A/100W	15V/5A/45W	1mV/0.1mA	USB/LAN/RS232/Digital I/O	Standard
IT-N6332A	3	445W	32V/10A/200W	9V/5A/45W	10mV/1mA	USB	Optional
IT-N6332B	3	445W	32V/10A/200W	15V/5A/45W	1mV/0.2mA	USB/LAN/RS232/Digital I/O	Standard
IT-N6333A	3	445W	60V/5A/200W	9V/5A/45W	10mV/1mA	USB	Optional
IT-N6333B	3	445W	60V/5A/200W	15V/5A/45W	1mV/0.1mA	USB/LAN/RS232/Digital I/O	Standard

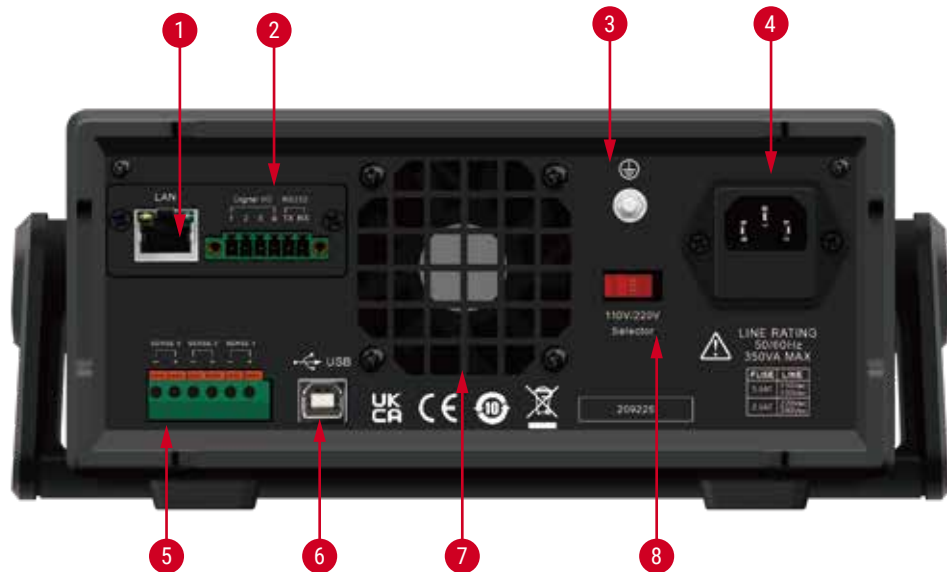
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No.	Item
1	Handle (removable)
2	USB port for inserting drives, which supports screenshot capture, data logging, and importing or exporting List files
3	4.3"LCD high-definition screen
4	Numeric keypad (includes combination-function)and ESC key
5	Pressable knob, left and right cursor keys, Enter keys

No.	Item
6	Shift combination key, View switch key, All On/Off key. (synchronizes control of 3 channels), and power switch
7	Feet (removable)
8	Function keys corresponding to the bottom menu on the screen (varying with different screen displays)
9	On/off output (keys for 3 channels independently)
10	Output terminals



No.	Item
1	LAN communication interface (only available in the IT-N6300B series)
2	Digital I/O and RS232 interface (only available in the IT-N6300B series)
3	Ground terminal (test ground)
4	AC power input socket (with fuse)

No.	Item
5	Remote sensing terminals for CH1, CH2, and CH3 (Sense)
6	USB communication interface
7	Ventilation window (exhaust vent)
8	110VAC/ 220VAC switch

Graphical User Interface (GUI)

The IT-N6300 Series features a 4.3-inch color LCD display with English and Chinese language support, meeting diverse global needs. The intuitive interface enables easy parameter settings, waveform observation, and quick language switching, ensuring smooth operation for all users. This design enhances usability, improves user experience, and ensures compatibility across regions and applications.



Single-Channel Meter Interface and Quick Setup Interface



Triple-Channel Meter Interface and Quick Setup Interface



Trend Chart Analysis for Monitoring Long-Term Voltage, Current, and Power Curves of DUT, with Real-Time Data Saving to USB Drive



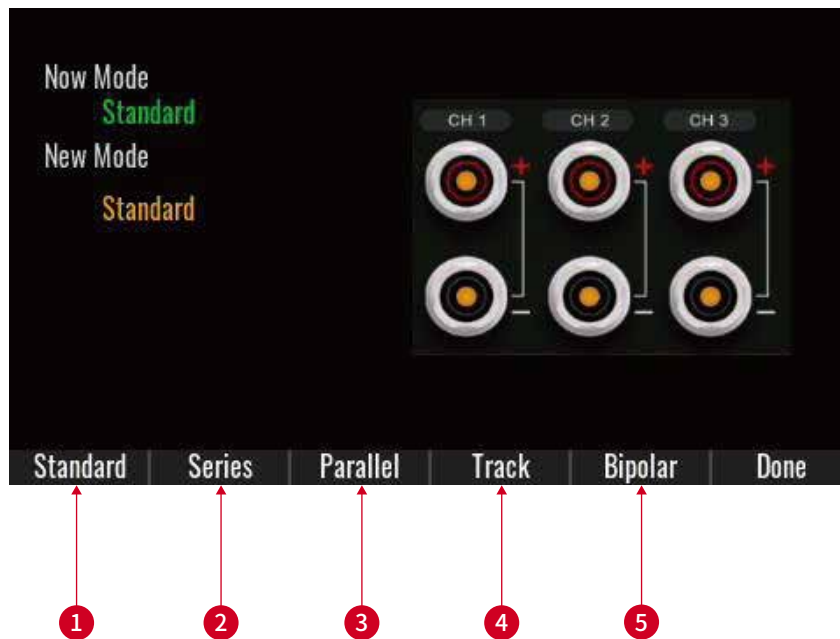
Dual-Language Support: English and Chinese

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Multiple Output Modes

The IT-N6300 Series integrates multiple built-in output modes, enabling flexible range expansion without the need for additional wiring. This streamlined design simplifies setup, reduces external cabling complexity, and minimizes errors caused by poor connections or intricate wiring, ensuring enhanced reliability and safety. With its capability to adapt to complex testing scenarios, the IT-N6300 Series boosts operational efficiency, improves measurement accuracy, and delivers a seamless, professional user experience.



1. Standard: Three fully independent output channels.
2. Series: CH1 and CH2 configured in series for higher output voltage.
3. Parallel: CH1 and CH2 configured in parallel to support higher current applications.
4. Track: CH1 and CH2 synchronized to ensure output changes simultaneously.
5. Bipolar: CH1 and CH2 configured for bipolar output.

List

The IT-N6300 Series features a LIST sequence editing function on each channel, allowing users to customize output waveforms and save them either to the device's internal memory or an external USB drive for future use. It also supports importing externally created waveform files for quick loading, eliminating the need for reconfiguration before testing. This capability streamlines the waveform setup process, improves testing efficiency, and offers users exceptional flexibility to handle a wide range of testing scenarios.

Value[A]	Slope[s]	Width[s]
0.0000	0.030	1.000

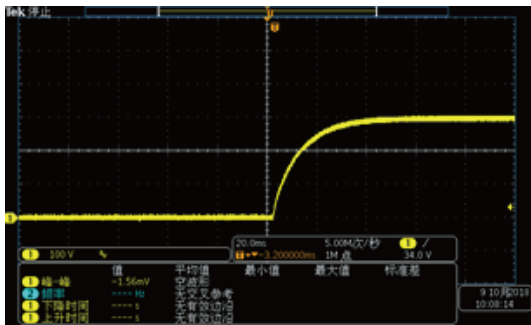
RunState: Stop Trig Source: Manual 0.000V
RunTime: 0.0S 0.0000A
File(int): 1 count: 1/1 0.00W
V-SET 0.000V
I-SET 5.0000A

1 0.000V 0.0000A OFF 2 0.000V 0.0000A OFF

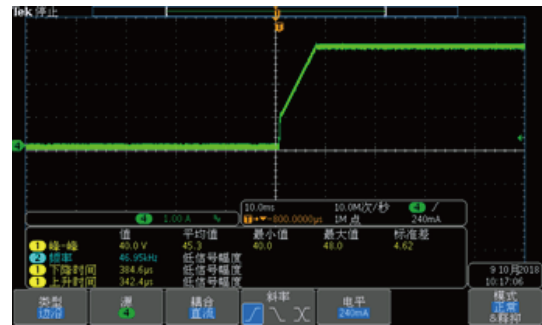
Channel VSET/ISET Open Edit TSource Run

CC&CV Priority

The IT-N6300 Series supports CC (Constant Current) and CV (Constant Voltage) priority modes, offering flexibility for demanding applications requiring high-speed response and overshoot-free output. Users can select the appropriate mode to ensure fast and stable load response, effectively preventing current or voltage overshoot. This feature enhances testing accuracy and reliability, making the IT-N6300 Series an ideal choice for long-duration precision testing and high-accuracy applications under challenging conditions.



CV priority, voltage without overshoot



CC priority, current without overshoot

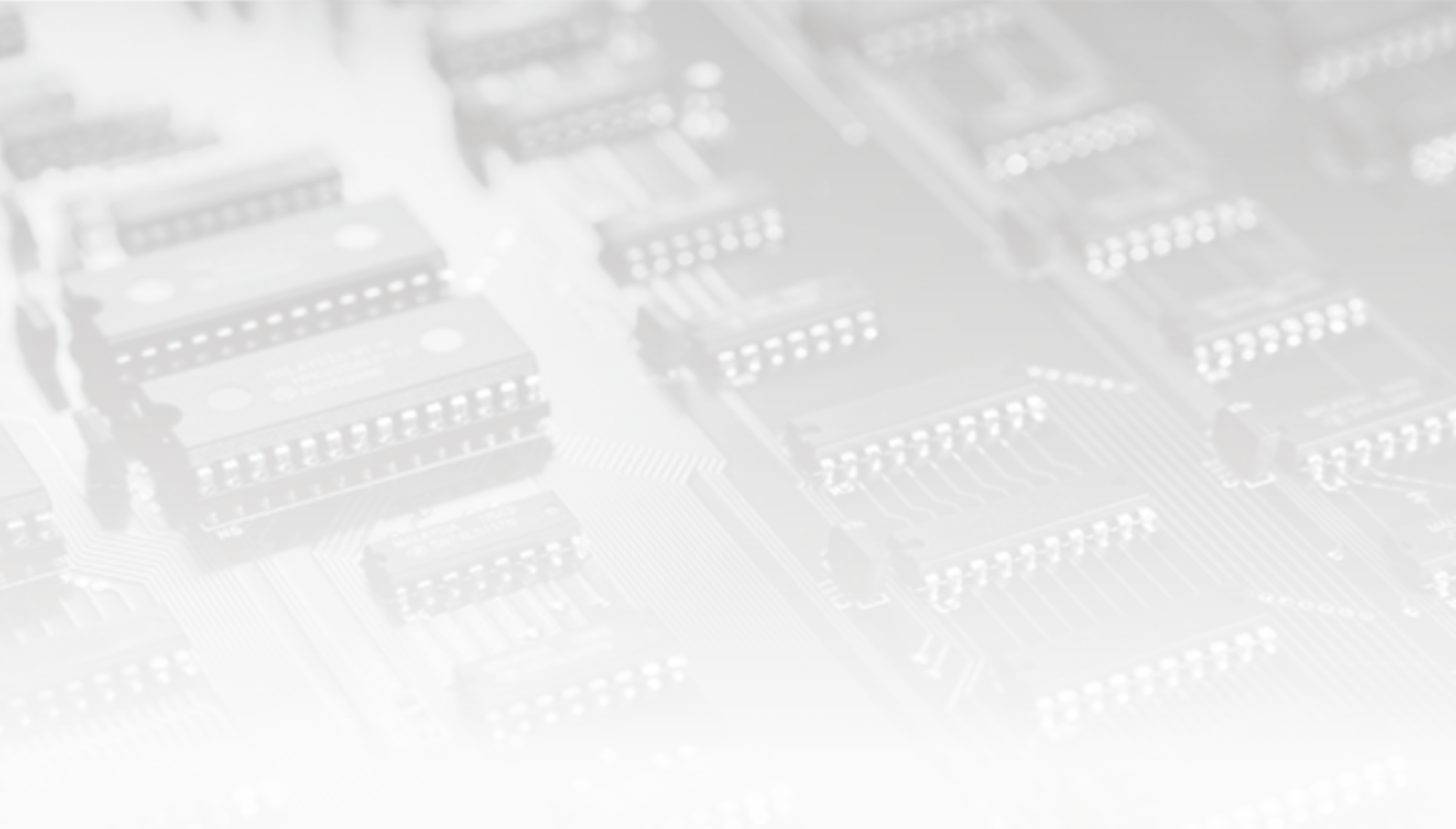
Comprehensive Protection Features

The IT-N6300 Series ensures reliable protection for valuable DUTs with features like OVP, UVP, OCP, UCP, OPP, and OTP. It also includes FOLDBACK protection, which shuts down output during CC/CV mode transitions to safeguard sensitive DUTs from voltage or current overshoot. Users can set operating modes and protection delay times, ensuring transitions trigger protection when needed, enhancing safety and reliability.



Optional Accessory

Rack mount kit	IT-E158B	Connector kit for the side-by-side installation of two units in standard cabinets with a depth of ≤790 mm, ensuring full compatibility with ITECH cabinets.
	IT-E158D	Connector kit for single-unit installation in standard cabinets with a depth of ≤790 mm, fully compatible with ITECH cabinets.
Test leads	IT-E30110-AB	IT-E30110-AB 10A / 1m / Alligator clips-Banana plugs A pair of red and black test line
	IT-E30110-BB	IT-E30110-BB 10A / 1m / Banana plugs-Banana plugs A pair of red and black test line
	IT-E30110-BY	IT-E30110-BY 10A / 1m / Banana plugs-Y-type terminals A pair of red and black test line
Exterior Protection	IT-E252	Silicone Protective Case , optional for IT-N6300A.



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

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