



IT-N6300 Series: Bipolar Innovation, Redefining Negative Voltage Power Supply

In cutting-edge applications such as new energy, semiconductors, automotive electronics, and lasers, testing requirements are becoming increasingly complex. Traditional positive voltage power supply solutions can no longer meet the demands of chip bias testing, electrochemical deposition processes, operational amplifier power supply, and other applications requiring negative voltage and seamless positive-negative voltage switching. ITECH IT-N6300 Series triple-channel programmable DC power supply revolutionizes negative voltage power solutions with its built-in bipolar output mode. Without additional wiring, it enables efficient and stable negative voltage supply, significantly enhancing testing convenience, stability, and precision.



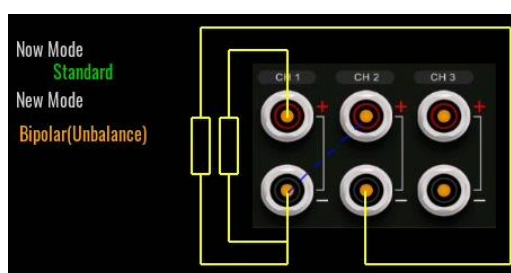
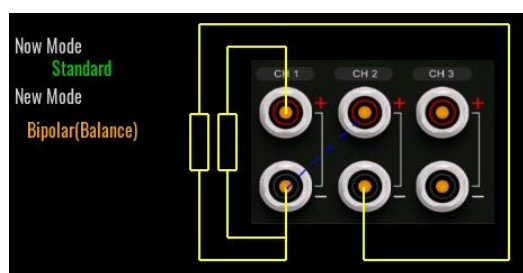
Breaking Tradition: Overcoming the Technical Bottleneck of Negative Voltage Power Supply

Before the emergence of the IT-N6300, achieving negative voltage power supply faced numerous technical challenges. The IT-N6300 Series Triple-Channel Programmable DC Power Supply adopts an

innovative hardware-level bipolar architecture, enabling more convenient, efficient, and precise negative voltage supply and seamless positive-negative switching.

1. **Built-in Bipolar Mode:** CH1/CH2 channels support both positive and negative output, allowing seamless switching to negative voltage power supply without additional wiring.
2. **Supports Balanced/Unbalanced Mode:** Users can freely choose whether CH1 and CH2 have the same or different absolute voltage values, adapting to diverse testing requirements. In balanced mode, all key parameters and LIST operation states are automatically synchronized, ensuring precisely matched positive and negative voltage output for improved testing consistency and convenience.
3. **Independent Three-Channel Control:** CH3 serves as an independent auxiliary channel, enabling multi-channel synchronous applications.

Functional items	Traditional solution	IT-N6300 solution
Additional wiring	Requires additional wiring, which may cause errors	No additional wiring is required, and negative voltage can be directly output
Wiring complexity	Requires additional connection of multiple power supplies to achieve multi-channel positive and negative voltages	A single device can meet the CH1 positive voltage and CH2 negative voltage test requirements
Test accuracy	Cable influence causes waveform distortion	Dynamic compensation to ensure accuracy



Bipolar functional test interface

Typical Application Scenarios

- Operational amplifier and chip bias voltage testing
- Negative voltage drivers and laser applications
- High-precision chip testing
- Electroplating and electrolysis applications

- New energy system testing



The menu bar below selects different built-in output modes

The IT-N6300 Series Triple-Channel Programmable DC Power Supply integrates multiple intelligent features, enabling engineers to complete testing tasks more efficiently:

- **High-Resolution Display:** Equipped with a 4.3-inch HD LCD screen for clear and intuitive channel parameter settings, test program editing, and curve observation.
- **High-Precision Output:** Provides 1mV/0.1mA high-resolution display, ensuring voltage and current accuracy in demanding testing environments.
- **Compact Design:** Features a standard ½ 2U chassis, saving laboratory space and making it suitable for both benchtop testing and rack installation.
- **Remote Control:** Supports multiple communication interfaces, including USB, LAN, and RS232, and is compatible with LabVIEW, Python, and other test software for automated testing.

Whether in laboratory R&D, production testing, or automated equipment integration, the IT-N6300 delivers more precise, convenient, and reliable power solutions. It helps engineers enhance testing efficiency and optimize testing processes.

For detailed product information, please refer to <https://www.itechate.com/en/product/dc-power-supply/IT-N6300.html>.