

## **FNIRSI® DPS-150 Mini DC Adjustable CNC Programmable Regulated Switching Power Supply – Product Description**

The **FNIRSI® DPS-150 Mini DC Adjustable CNC Programmable Regulated Switching Power Supply** is a compact, versatile, and high-performance power supply designed for electronics enthusiasts, engineers, and DIY hobbyists. Engineered to deliver precise voltage and current control, this device is ideal for powering circuits, testing components, and experimenting with electronics projects. Its combination of programmability, stability, and user-friendly operation makes it a must-have tool for anyone working with DC electronics.

### **Precision Adjustable Output**

The DPS-150 allows users to adjust both voltage and current with high accuracy. With a voltage output range of **0–30V** and a current range of **0–5A**, this power supply is suitable for a wide variety of applications—from powering small microcontroller projects to testing larger electronic devices. The fine adjustment knobs and intuitive digital display make it easy to set the exact output parameters for any project.

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### **Programmable CNC Features**

One of the standout features of the DPS-150 is its **CNC programmable functionality**, allowing users to define output sequences and automate voltage and current changes. This is especially useful for repetitive testing, component burn-in, and controlled power experiments. Users can program voltage ramps, current limits, and time sequences, providing flexibility that standard lab power supplies cannot match.

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### **Stable and Regulated Switching Design**

The FNIRSI DPS-150 uses a **regulated switching power supply design**, which ensures stable and consistent output even under varying load conditions. This reduces the risk of component damage and ensures reliable operation for sensitive electronics. Its high efficiency design also minimizes heat generation, making it safe and energy-efficient for prolonged use.

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### **Digital Display and Intuitive Interface**

Equipped with a clear **LED digital display**, the DPS-150 shows real-time voltage, current, and power readings. The interface is user-friendly, allowing fast adjustments and accurate

monitoring. Indicators for over-voltage, over-current, and thermal protection enhance safety and reliability during testing and experimentation.

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### **Compact, Portable, and Durable**

The miniaturized design of the DPS-150 makes it easy to integrate into workbenches, electronics labs, or even portable kits for field use. Despite its small size, it is built with robust materials that ensure durability and long-lasting performance. Its lightweight nature makes it easy to transport and store without compromising functionality.

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### **Versatile Applications**

The DPS-150 is perfect for a wide range of applications, including:

- Electronics prototyping and testing
  - Arduino, Raspberry Pi, and other microcontroller projects
  - Battery charging and testing
  - DIY robotics and automation projects
  - Laboratory experiments and educational purposes
  - CNC and PCB manufacturing testing
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### **Safety Features**

Safety is a key design aspect of the DPS-150. It includes **over-voltage protection (OVP)**, **over-current protection (OCP)**, and **thermal protection**, safeguarding both the power supply and connected components. This makes it ideal for both beginners and professional engineers who require safe, precise, and repeatable power control.

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### **Summary of Key Features**

- Adjustable DC output: 0–30V, 0–5A
- CNC programmable sequences for automated testing
- Regulated switching design for stable voltage and current

- LED digital display for real-time monitoring
- Over-voltage, over-current, and thermal protection
- Compact, portable, and durable design
- Ideal for DIY, lab work, and professional electronics testing