

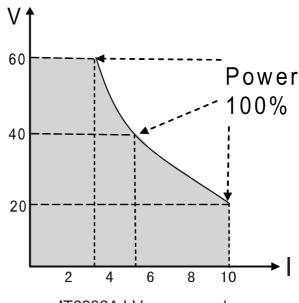
#### Features

- VFD display
- Output on/off control
- Convenient data entry via knob or numerical key pad
- High accuracy and high resolution: 1mV/0.1mA
- Low ripple and low noise
  Rack mount kit available
- List Mode: generate, store and execute test sequences without the need for an external computer.
- Built-in communication interface:RS232/USB/GPIB
  Different from IT6900A, IT6900B has the external 0-10V analog interface.
- Output Timer(0.1 ~ 99999.9S) Function
- Remote Sense Function
- OVP/OCP/OTP/LCP protection fucntions
- Intelligent fan control

| Model   | Power | Voltage | Current |
|---------|-------|---------|---------|
| IT6922A | 100W  | 60V     | 5 A     |
| IT6932A | 200W  | 60V     | 10A     |
| IT6942A | 360W  | 60V     | 15A     |
| IT6952A | 600W  | 60V     | 25A     |
| IT6953A | 600W  | 150V    | 10A     |

## IT6900A /B Multi-function Power Supply

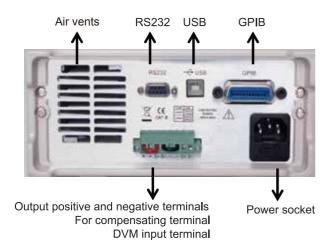
IT6900A series are flexible range single output power supplies. With an easy-to-read VFD display, high accuracy and resolution up to 1mV/0.1mA. It allows to generate and store programmed sequences directly from the front panel. Built-in RS232, USB, GPIB interfaces to provide flexibility for remote operation. IT6900A/B is a compact, laboratory grade power supply well-suited for application in design field, production or use in university labs.



IT6932A I-V curve graph

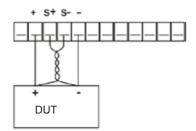


## Rear Panel



## Remote Sense

Remote sense can be used to compensate for voltage drops (up to 1V) due to resistance from test leads connected to your device under test (DUT), thus providing more accurate output voltage. The power supply is initially setup to local sense mode by default. Refer to the following sections for details of local and remote sense setup.



## **Built-in DVM**

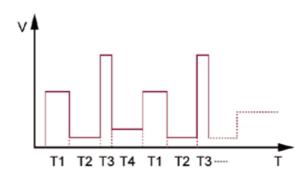
IT6900A provides a built-in digital meter which can measure DC volts in a range from 0.001V-61.000V. The voltage value is displayed on the left bottom field of the display.

## **Timer Function**

IT6900A supports output on timer function. If Timer State is set to  $\mathsf{ON}$ , then power supply output will turn off after the timer elapsed.

The timer setting range is 0.1~99999.9S

#### List Mode



List mode allows user to create a sequence of steps, store it into the power supply's non-volatile memory and execute it. The input parameters for generating a list include the name of the list file, the input steps (no more than 150 steps), the step time (the minimum is 100mS) and the value of each step.

## **Convenient Panel Operation**

An easy-to use rotary knob and self-guiding keypads allow you to set the output at your desired value without any effort. Also, both voltage and current levels can be set to a maximum resolution of 1mV/0.1mA. In addition, you can store and recall for up to 9\*8 groups setups using the internal non-volatile memory.

# **Auto-range Function**

IT6900A series power supply has adopted Auto-range technology. One unit could replace multiple units with different specifications. Take IT6932A(60V/10A/200W) as an example, the user could used as a 60V/3.3A/200W instruments and also a 20V/10A/200W unit.

## **Protection Functions**

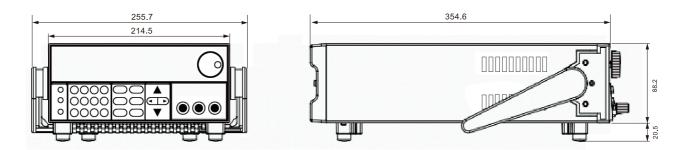
IT6900A series power supply provides OV, OC, OT protection functions. It enables user to configure OVP and OCP value. When any protection level is triggered, power supply will turn off the output automatically.



# IT6900A Specifications

| Parameter                             |                           | IT6922A    | IT6932A    | IT6942A                  | <b>I</b> T6952A      | IT6953A                 |
|---------------------------------------|---------------------------|------------|------------|--------------------------|----------------------|-------------------------|
| Output Rating value ( 0 °C~40 °C)     | voltage                   | 0 ~60V     | 0 ~60V     | 0 ~60V                   | 0 ~60V               | 0~150V                  |
|                                       | current                   | 0~5A       | 0~10A      | 0~15A                    | 0~25A                | 0~10A                   |
|                                       | power                     | 100W       | 200W       | 360W                     | 600W                 | 600W                    |
| Load regulation±(%of output+offset)   | voltage                   | <0.01%+3mV | ≤0.01%+5mV | ≤0.01%+8mV               | ≤0 <b>.</b> 01%+15mV | ≤ 0.01%+15mV            |
|                                       | current                   | ≤0.05%+2mA | ≤0.05%+4mA | ≤0.05%+6mA               | ≤0.1%+10mA           | ≤ 0.05%+10mA            |
| Line regulation ± (%of output+offset) | voltage                   | <0.01%+3mV | ≤0.01%+5mV | ≤0 <b>.</b> 01%+8mV      | ≤0.01%+15mV          | ≤ 0 <b>.</b> 01%+15mV   |
|                                       | current                   | ≤0.05%+2mA | ≤0.05%+4mA | ≤0.05%+6mA               | ≤0.1%+10mA           | ≤ 0.05%+10mA            |
| Setup resolution                      | voltage                   | 1mV        | 1mV        | 1mV                      | 1mV                  | 1mV (<100V)10mV (>100V) |
|                                       | current                   | 0.1mA      | 0.1mA      | 0.1mA                    | 0.1mA                | 0.1mA                   |
| Readback resolution                   | voltage                   | 1mV        | 1mV        | 1mV                      | 1mV                  | 1mV (<100V)10mV (>100V) |
|                                       | current                   | 0.1mA      | 0.1mA      | 0.1mA(<10A)1mA(>10A)     | 0.1mA(<10A)1mA(>10A) | 0.1mA                   |
| Setup accuracy                        | voltage                   | ≤0.03%+5mV | ≤0.03%+5mV | ≤0.03%+5mV               | ≤0.03%+5mV           | ≤0.03%+20mV             |
| (25°C±5°C) ±(%of output+offset)       | current                   | ≤0.1%+5mA  | ≤0.1%+10mA | ≤0.1%+15mA               | ≤0.1%+25mA           | ≤ 0.1%+25mA             |
| Readback resolution                   | voltage                   | ≤0.03%+5mV | ≤0.03%+5mV | ≤0.03%+5mV               | ≤0.03%+5mV           | ≤0.03%+20mV             |
| (25°C±5°C) ±(%of output+offset)       | current                   | ≤0.1%+5mA  | ≤0.1%+10mA | ≤0.1%+15mA               | ≤0.1%+25mA           | ≤ 0.1%+25mA             |
| Ripple (20Hz ~20MHz)                  |                           | ≤5mVp-p    | ≤8mVp-p    | ≤15mVp-p                 | ≤20mVp <b>-</b> p    | ≤ 50mVp-p               |
|                                       |                           | ≤5mArms    | ≤6mArms    | ≤8mArms                  | ≤15mArms             | ≤15mArms                |
| Sample rate                           | 10Hz                      |            |            | 10Hz                     |                      |                         |
| Dimension (mm)                        | 214.5mmW×88.2mmH×354.6mmD |            |            | 214.5mmW×88,2mmH ×445mmD |                      |                         |
| Weight                                |                           | 7.7Kg      |            | 15Kg                     |                      |                         |

## IT6900A Dimension (Unit: mm)



- IT6932A / IT6942A :214.5mmW×88.2mmH×354.6mmD
- IT6952A / IT6953A :214.5mmW×88.2mmH×445mmD

## Standard Accessories

| Power Cord         |  |
|--------------------|--|
| Calibration Report |  |
| User Manual        |  |