

## IT6300 Power Supply 43



#### Feature

- Linear power with 3 channels
- Highlight vacuum screen VFD display
- Ultra-low ripple and noise
- The smallest volume:1/2 2U among the similar products, save limited space
- 1mV/1mA high accuracy and resolution
- Support GPIB/USB/RS232 communication interfaces
- Full 3 channels isolated power supply
- Support standard SCPI communication protocol
- Free PC6800 PC monitoring software
- 19 inch rack mount
- Output value can be up to 60V in series connection, and 9A in parallel connection
- Can set and display 3 channels voltage and current at one time, without switching

#### IT6322 Triple output DC power supply

IT6322 series programmable 3 channel power supply, with 1mV, 1mA high solution and accuracy, ensure your accurate measurement. Applying high resolution VFD display screen, they can set and display the voltage and current of 3 channels at one time without switching and greatly simplify the complex operation of traditional 3 channels power .

#### 3 groups isolated voltmeters and ammeters

| 31. | 001U | 31. | 013V | .Alla | 5. | 004U |
|-----|------|-----|------|-------|----|------|
| Ø.  | 900A | Ø.  | 999A |       | 0. | 999H |

#### Series connection operation

| ¥32. | 9920 | 0.000V      | Series |
|------|------|-------------|--------|
| Ø.   | 999A | <off></off> | CH1+3  |

#### Parallel connection operation

| 9. | 9940  | Air. | 5. | 0000 | Paralel |
|----|-------|------|----|------|---------|
| Ø. | 9999A |      | Ø. | 000A | CH5÷3   |



# 44 IT6300 Power Supply

## Your Power Test Solution

|      |                   |         | CH1 | CH2                        | CH3 |
|------|-------------------|---------|-----|----------------------------|-----|
| Outp | out Rating        | Voltage | 30V | 30V                        | 5V  |
|      |                   | Current | ЗA  | ЗА                         | ЗА  |
|      |                   | Power   | 90W | 90W                        | 15W |
| Load | d Regulation      | Voltage |     | <0.01% + 3mV               |     |
|      |                   | Current |     | <0.01% + 3mA               |     |
| Line | Regulation        | Voltage |     | <0.01% + 3mV               |     |
|      |                   | Current |     | <0.1% + 3mA                |     |
| Setu | up Resolution     | Voltage |     | 1mV                        |     |
|      |                   | Current |     | 1mA                        |     |
| Read | d Back Resolution | Voltage |     | 1mV                        |     |
|      |                   | Current |     | 1mA                        |     |
| Setu | up Accuracy       | Voltage |     | <0.03% + 10mV              |     |
|      |                   | Current |     | <0.1% + 5mA                |     |
| Read | d Back Accuracy   | Voltage |     | <0.03% + 10mV              |     |
|      |                   | Current |     | <0.1% + 5mA                |     |
| Ripp | ole (20-20M Hz)   | Vpp     |     | 3mVp-p                     |     |
|      |                   | Irms    |     | 5mArms                     |     |
| Tem  | p. Coefficient    |         |     | <0.03% + 10mV              |     |
|      |                   |         |     | <0.1% + 5mA                |     |
|      |                   |         |     | 0-40                       |     |
| Dime | ension            | W*H*D   |     | 214.5mm * 88.2mm * 354.6mm |     |
| Weig | ght               | Net     |     | 9Kg                        |     |
|      |                   |         |     |                            |     |





#### Standard accessories

| Power cord         |  |
|--------------------|--|
| User manual        |  |
| Calibration report |  |

#### **Optional accessories**

- IT-E131 RS232 Communication cable
- IT-E132 USB Communication cable
- IT-E135 GPIB Communication cable
- IT-E151 Rack mount kit

### IT6300 Power Supply 45





#### Feature

- Triple output voltage, all are adjustable.
- Can set to serial/ parallel/ track mode
- The voltage and current for each channel can be displayed at the same time
- Small size of 1/2 2U
- VFD display
- Function keys with LED light
- Remote measurement function, compensation online pressure drop
- High accuracy, high resolution and high stability
- Limited voltage and over heat protection
- Intelligent fan control
- Built-in RS232/USB/GPIB communication interface
- Low ripple and low noise
- Can be monitored by computer software
- Support standard SCPI communication protocol
- Memory capacity of 36 groups, for save and recall
- Can adjust the stepping by left/right arrow button
- Output timer function(0.1~99999.9 seconds)
- Isolated circuit, support plus and minus reverse

#### IT6322B rear panel picture

### IT6300B

IT6300B triple output power supply can adjust the stepping by left/right arrow button, very convenient for your operation.

IT6300B has remote measurement function, it can ensure your testing accurately.

And built-in RS232,USB,GPIB interface, and each channel can set to serial/ parallel/ track mode, it can bring multipurpose testing solution to you.

#### Triple isolated voltage and current

| A   | 0.001V    | Series | 0.001V |
|-----|-----------|--------|--------|
|     | 0.000A    | CH1+2  | 0.000A |
| Ser | rial mode |        |        |
|     | 0.001V    | 0.001V | Para   |
|     | 0.000A    | 0.000A | CH2+3  |

Parallel mode

| \$<br>Ø. | 001U | Ø.   | 003U | 0. | 0010 |  |
|----------|------|------|------|----|------|--|
| -Ø.      | 000A | , Ø. | 999A | Ø. | 000A |  |

Track mode, set the parameter of one channel, the parameter of other channels will be changed.

| 型 号     | 规格              |
|---------|-----------------|
| IT6322B | 30V/3A/90W*2CH  |
|         | 5V/3A/15W*1CH   |
| IT6332B | 30V/6A/180W*2CH |
|         | 5V/3A/15W*1CH   |
| IT6333B | 60V/3A/180W*2CH |
|         | 5V/3A/15W*1CH   |

\* IT6300A series don't including GPIB interface.



Visit www.itechate.com for more information.

#### **IT6322B Specifications**

| Parameters                       |                                   | IT6322B                                   | IT6332B                                   | IT6333B                                   |
|----------------------------------|-----------------------------------|---|---|---|
| Input rating                     | voltage                           | 0~30V×2, 0~5V×1                           | 0~30V×2, 0~5V×1                           | 0~60V×2, 0~5V×1                           |
|                                  | current                           | 0~3A×2, 0~3A×1                            | 0~6A×2, 0~3A×1                            | 0~3A×2, 0~3A×1                            |
|                                  | Voltage limiting protection       | 0~31V×2, 0~6V×1                           | 31V×2, 6V×1                               | 0~61V×2, 0~6V×1                           |
| Load Regulation                  | voltage                           | ≪0.01%+3mV                                | ≤0.01%+3mV                                | ≤0.01%+3mV                                |
|                                  | current                           | ≪0.1%+3mA                                 | ≤0.01%+3mA                                | ≤0.01%+3mA                                |
| Line Regulation                  | voltage                           | ≪0.01%+3mV                                | ≤0.01%+3mV                                | ≤0.01%+3mV                                |
|                                  | current                           | ≪0.1%+3mA                                 | ≤0.01%+3mA                                | ≤0.01%+3mA                                |
| Setup Resolution                 | voltage                           | 1mV                                       | 1mV                                       | 1mV                                       |
|                                  | current                           | 1mA                                       | 1mA                                       | 1mA                                       |
| Readback Resolution              | voltage                           | 1mV                                       | 1mV                                       | 1mV                                       |
|                                  | current                           | 1mA                                       | 1mA                                       | 1mA                                       |
| Setup Accuracy                   | voltage                           | ≤0.03%+10mV                               | ≤0.03%+10mV                               | ≤0.03%+10mV                               |
|                                  | current                           | ≪0.1%+5mA                                 | ≤0.1%+8 mA(x2), ≤0.1%+5mA(x1)             | ≤0.1%+5mA                                 |
| Readback Accuracy                | voltage                           | ≪0.03%+10mV                               | ≤0.03%+10mV                               | ≤0.03%+10mV                               |
|                                  | current                           | ≪0.1%+5mA                                 | ≤0.1%+8mA(x2), ≤0.1%+5mA(x1)              | ≤0.1%+5mA                                 |
| RippleRipple and noise           | voltage                           | ≤1mVrms/3mVp-p                            | ≤4mVp-p(x2) ≤1mVrms,≤3mVp-p               | o(x1) ≤1mVrms                             |
|                                  | current                           | ≪3mArms                                   | ≤5mArms (x2), ≤4mArms(x1)                 | ≤4mArms                                   |
| Temp.coefficient                 | voltage                           | ≪0.03%+10mV                               | ≤0.03%+10mV                               | ≤0.03%+10mV                               |
|                                  | current                           | ≪0.1%+5mA                                 | ≤0.1%+5mA                                 | ≤0.1%+5mA                                 |
| ReadbackTemp.coefficient         | voltage                           | ≪0.03%+10mV                               | ≤0.03%+10mV                               | ≤0.03%+10mV                               |
|                                  | current                           | ≪0.1%+5mA                                 | ≤0.1%+5mA                                 | ≤0.1%+5mA                                 |
| Serial synchronous operation     | The cascade synchronization error | r   | ≤0.02%+5mV                                | ≤0.02%+10mV                               |
|                                  |                                   | ≪0.05%+10mA                               | ≤0.1%+30mA                                | ≤0.1%+30mA                                |
| Series parallel setting accuracy | voltage                           | ≪0.02%+5mV                                |   |   |
|                                  | current                           | ≪0.1%+20mA                                |   |   |
| Memory                           | Save / Recall                     | 36 groups                                 | 36 groups                                 | 36 groups                                 |
|                                  |                                   |   |   |   |
| Timer                            | Time setting                      | 0.1S-99999.9S                             | 0.1S-99999.9S                             | 0.1S-99999.9S                             |
|                                  | Resolution                        |   |   |   |
|                                  | Function                          | Timer function for turning off the output | Timer function for turning off the output | Timer function for turning off the output |
| Dimension                        | W*H*D                             | 214.5mm * 88.2mm * 354.6m m               | 214.5mm×88.2mm×453.1mm                    | 214.5mm×88.2mm×453.1mm                    |

#### ThThe difference between IT6322B and IT6322

A, IT6322B is using new button layout, Local and left/right arrow buttons added, function keys with LED light, built-in standard RS232, USB and GPIB communication interfaces, which makes the communication much faster.

B, IT6322B supports track mode settings. When single channel parameter changed, the other channel parameters will also change in direct proportion at the same time.

#### Track mode

Select track mode, CH1 and CH2, CH2 and CH3, or all three channels to be set as track mode, if any one channel parameter changed, the corresponding parameters of the other channels will also change in direct proportion. For example, set up voltage and current of CH1 and CH2 to be CH1:4V, 1A; CH2:8V, 2A. Set CH1 and CH2 in track mode, in output off and Meter state, VFD is shown below:



In this state, if voltage of CH1 set to be 2V, the voltages of CH2 will automatically synchronize to be 4V (proportionally).