CircuitSpecialists.com

CSI Series

REGULATED DC POWER SUPPLY

CSI3303S CSI5505S

Users Manual

Thanks for using our products, please read this manual thoroughly before operation.

OVERVIEW

MODEL: CSI3303S / CSI5505S regulated DC power supply is a high reliability, variable DC Power Supply with built in short circuit and thermal protection. The power supply is suitable for the laboratory, electronics, communications equipment maintenance, Product line, scientific research and educational institutions.

SPECIFICATIONS

1. Rated working conditions and external dimensions

Input AC voltage

AC 120V±10%, Frequency 60Hz

Working conditions

Temperature range: 0°C ~ 40° C
Relative humidity less than 80%

Storage conditions

Temperature range: -20°C ~ 80°C
Relative humidity less than 80%

Dimension

(L)360×(W)260×(H)160mm

Accessories

users manual 1pcs
power cable 1pcs

2. Technical Specifications

(1) Independent pattern

- Output voltage adjustable from 0 to 30V. x 2
- Output current adjustable from (CSI3303S 0 to 3Amps / CSI5505S 0 to 5 Amps).
- Load regulation: CV less than 0.1%+3mV *(I_{load}>=3A).*
- Fixed 5V output @ 3A x1

CV less than 0.5% +5mV *(I_{load}>3A)*

Ripple and noise: CV<=1mV$_{RMS}$ *(I_{load}<=3A)*
(5Hz~1MHz) CV<=1mV$_{RMS}$ *(I_{load}>3A)*
Voltage accuracy: +/-0.5%rdg+2byte
Current accuracy: +/-.5%rdg+2byte
Display resolution: +/-0.5%rdg+2byte

(2) Output Specification

Rated output: 5.0 +/-0.1V 3A
Load regulation: less than 10mV
Ripple and noise: *(5Hz~1MHz)*<<=1mV$_{RMS}$

3. Tracking characteristics

(1) Series specifications Load regulation: less than 50mV
Ripple and noise: *(5Hz~1MHz)* <=3mV$_{RMS}$

(2) Parallel characteristics:
Load regulation: less than 50mV
Ripple and noise: *(5Hz-1MHz)* CV less than 1mV<=*6A)*, CV less than 1.5mV (I>*6A)*

4. Safety requirements

High voltage test: Leakage current I<=1 mA (Test conditions: 1700VAC/2s from the input power to the ground, Input high AC voltage: 1700V, Time: 2 seconds)
Insulation resistance: Insulation resistance more than 100MΩ (Test conditions: 500V$_{dc}$/5s *From the input power to the ground, Input high DC voltage: 500Vdc, Time: 5 seconds).Time: 5 seconds).*

INSTRUCTIONS

1. Notes:

(1) AC input
AC input should be 110V±10%, 60Hz

(2) Heat
Do not exceed 40 degrees Celsius temperature environment in use, there is a fan in the unit so the user must provide sufficient clearance for required airflow.

(3) Output voltage overshoot
When switching power supply device, the output voltage is not more than preset value.

(4) Overheating protection

This power supply is equipped with a thermal protection circuit. This overheating protection function can protect internal components and user equipment from overheating If power transformers internal temperature overheats it will automatically cut off the input voltage. When the internal temperature of the power supply returns to the normal range, input power will restore to the default working state.

2. Current limiting Settings

- Safety of the instrument & operator should always be considered.
- To set Current Limiting:

(1) Rotate the voltage control knob until the output voltage is from 3V to 5V.
(2) Using a wire, temporarily short circuit the (+) & (-) output terminals.
(3) The CC designator light should now be illuminated.
(4) Adjust current knob to the desired maximum current value.
(5) Remove the short circuit connection between the (+) & (-) terminals.
(6) Current limiting setting complete.

3. Constant voltage/current characteristics

The power supply will automatically switch from constant voltage (CV) to constant current (CC) mode when the load current exceeds the previously set value.

4. Operating methods

Connect the load to the Positive (+) and Negative (-) terminals.

Independent operation Mode.
Rotate the switch to the position marked "INDEP". the LED above that position will light.

Series tracking mode:

Rotate the switch to the position marked "SERIES", the LED above that position will light. Use the positive "+" output terminal of Supply I for the positive output terminal of the series connected supply and use the negative "-" terminal of Supply II for the negative output terminal. In the series mode, the output voltage is controlled by the voltage adjustment knob for Supply II. Similarly for the current adjustment.

Parallel tracking mode:

Rotate the switch to the switch to the position marked "PARALLEL". The LED above that position will light. Use the positive "+" output terminal of **Supply II** for the positive output terminal of the parallel connected supply and use the negative "-" terminal of Supply II for the negative output terminal.

In the parallel tracking mode the output voltage is controlled by the voltage adjustment knob for Supply II, Similarly for the current adjustment.

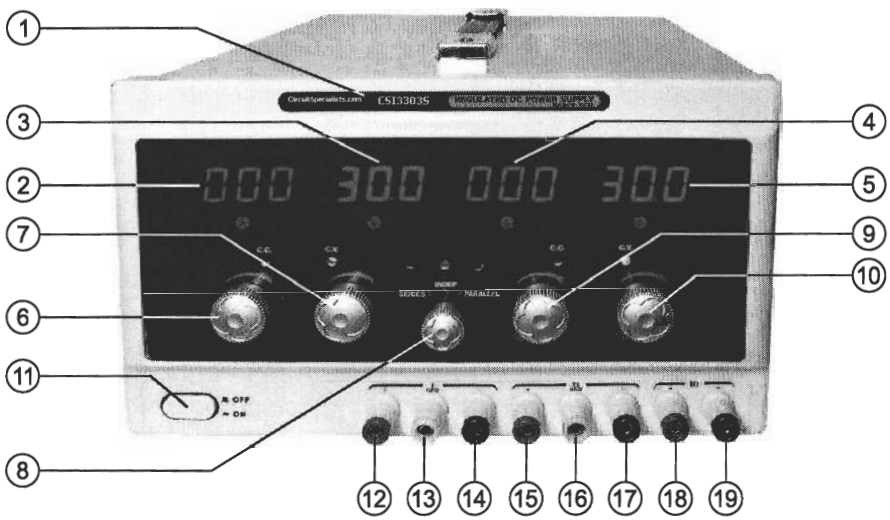
In the parallel tracking mode it is recommended to connect the positive "+" terminals of Supply I and Supply II together and the negative "-" terminals of Supply I and Supply II together. This will result in optimal regulation.

5. Fuse Replacement:

This power supply has a internal protection fuse. Unplug the power cord and any connected load before opening the case to replace a blown fuse. Replace the fuse with the same value and rating.

CONTROL & TERMINAL LAYOUT

CSI3303S / CSI5505S Regulated DC Power Supply:



1. Product model
2. Load I Current display
3. Load I Voltage display
4. Load II Current display
5. Load II Voltage display
6. Load I Current adjust knob
7. Load I Voltage adjust knob
8. Tracking mode selection knob
9. Load II Current adjust knob
10. Load II Voltage adjust knob
11. Power Switch
12. Load I Positive (+) terminal
13. GROUND
14. Load I Negative (-) terminal
15. Load II Positive (+) terminal
16. GROUND
17. Load II Negative (-) terminal
18. Load III Positive (+) terminal
19. Load III Negative (-) terminal

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