

Dual Channel Power Supply (v3)

DESCRIPTION

The PS209 dual output power supply incorporates two high quality DC/DC converters packaged in the compact 23.5mm DIN-Rail housing. The PS209 features a wide input voltage swing on each model such as input option 2 that has 11 - 60Vdc for output loads up to 5W, and 8 - 60V for 1.5W loads. There are two output ranges 11-33Vdc and 4.5-13Vdc that are factory set to 24Vdc and 12Vdc respectively. Each can be factory set to customer requirements on request or customer set using 15 turn trimmers CH1 is on the front and CH2 is accessed by un-clipping the case. The output is internally short-circuit protected and a green L.E.D. indicator verifies the function of the module. Input to output and output to output isolation of 2kV rms make the PS209 suitable for a wide range of applications:

- Step-up conversion to provide 24Vdc from 12Vdc battery supplies.
- Step-down conversion to reduce 24Vdc to 5Vdc for digital indicators or TTL compatible equipment.
- Galvanic isolation where the DC supply to instruments, control loops and sensors needs to be floating to avoid earth-loop problems.
- One PS209 can supply 2 x 4 -20mA loops independently.
- Unipolar to bipolar conversion.

General Specifications

Size: 23.5W x 71.5H x 109D (mm). Clip for 35mm DIN-Rail. Mounting:

Housing material: ABS.

Protection class: IP40 (IP65 optional). Connection: Screw terminals.

0.150 kg. Weight:

Input voltage swing: 11 - 60V (5W output) 8 - 60V (1.5W output).

Output power: 5 watt maximum per channel.

Voltage accuracy: ±1% maximum.

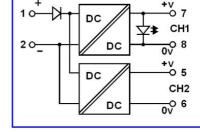
Line regulation: 0.1%

0.2% (5W) / 0.1% (1.5W). Load regulation:

Temperature co-efficient: ±0.02%/°C. Ripple and noise (20MHz BW): 50mVpp.max. Short circuit protection: Internal protected

Efficiency (5W): >60%. Efficiency (1.5W): >65%. Isolation voltage: 2kV rms. -20...+70°C. Operating temp. range: Switching frequency: 70 - 100kHz.

Electromagnetic compatibility: Complies with AS/NZS 4251.1 (EN 50081.1)



INPUT

0V

CH₂

Tel:

DUAL OUTPUT

(02) 8825 9295

(02) 8825 9290

CH1

TYPE NO. PS209 - X X X 0

Input:-

2 = 11 - 60 Vdc

*) 5 = 20 - 40Vac

*) 8 = 60 - 140Vdc, 48 - 110Vac.

Output 1:

7 = 11 - 33 Vdc

Factory set at 24Vdc or specify.

8 = 4.5 - 13 Vdc

Factory set at 12Vdc or specify.

Output 2:-

7 = 11 - 33 Vdc

Factory set at 24Vdc or specify.

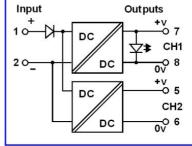
8 = 4.5 - 13 Vdc

Factory set at 12Vdc or specify.

NESS Corporation

APCS division

In the interest of development and improvement, APCS reserve the right to amend, without notice, details contained in this publication. APCS will accept no legal liability for any errors, omissions or amendments



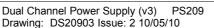
Connection Diagrams

POWER

OUT

€ ADJ

S v



BIPOLAR OUTPUT