

Dual Channel Power Supply (v3) BPS209

DESCRIPTION

The BPS209 dual output power supply incorporates two high quality DC/DC converters packaged in the compact 23.5mm DIN-Rail housing. The BPS209 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 BPS209 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 BPS209 can supply 2 x 4 -20mA loops independently.

GENERAL SPECIFICATIONS

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

Housing material: ABS.

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

Weight: 150 g.

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

Output power: 5 watt maximum per channel.

Line regulation: 0.1%

0.2% (5W) / 0.1% (1.5W). Load regulation: ±0.02%/°C.

Temperature co-efficient:

Ripple and

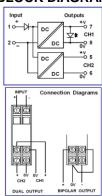
Noise (20MHz BW): 50mVpp.max. Internal protected Short circuit protection:

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

Electromagnetic compatibility: Complies with EN 50081-1, EN 50082-2, EN61010-1



BLOCK DIAGRAM



BPS209 - X X X 0

TYPE NO. DESIGNATION

Input:-

2 = 11 - 60 Vdc

*) 5 = 20 - 40 Vac

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

Output 1:-

7 = 11 - 33Vdc (Factory set at 24Vdc or specify). 8 = 4.5 - 13Vdc (Factory set at 12Vdc or specify).

Output 2:-

7 = 11 - 33Vdc (Factory set at 24Vdc or specify). 8 = 4.5 - 13Vdc (Factory set at 12Vdc or specify).

*) Price Extra.

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DUAL CHANNEL 5W POWER SUPPLY

BPS209

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