



POWER SUPPLY - +/- regulator module

Cat: LQ2646-001 12V.AC input, +/- 1.2-20V.DC reg.output 200mA

DESCRIPTION:

The IEC 'Regulator Module' is a useful instrument that converts any AC or DC power source into a regulated, adjustable and metered dual power source at up to 200mA. It is ideal for performing electronic experiments where a positive and negative power supply is required (for op-amps and similar) and can make the purchase of more expensive regulated power supplies unnecessary. The instrument is powered by 240/12V.AC. mains adaptor or through 4mm sockets on the end panel. Two pairs of 4mm sockets are provided for the +/- split supply.

LQ2646-001 +/- 1.2 – 20V.DC. regulator module



Physical size: 137x75x65mm LxWxH

Weight: 0.37 kg

THE MEANING of REGULATION: An **unregulated** power supply is simple and inexpensive but has the following disadvantages:

- The output voltage will rise and fall as the mains voltage rises and falls.
- If the load current changes, the output voltage changes also.
- If the DC output is filtered only by capacitance, the output voltage will contain more and more ripple as the output current (load) increases.

Available From:



Unit 4, Cnr Ring Road and Sturt St. Ballarat VIC 3350
Free call: 1800 067 674 **www.wiltronics.com.au**



A **regulated** power supply is far more complex and is normally more expensive than a simple unregulated unit, but it has the following advantages:

- The output voltage does not alter as mains voltage fluctuates.
- The output voltage does not alter as the load current changes from zero to full load.
- The output voltage is smooth (ripple free) at no load through to full load.
- When the output voltage is set by the control knob there is no need to monitor it during experiments because it remains exactly constant regardless of fluctuations in load current drawn.

SPECIFICATIONS:

- **INPUT:** Typically 12V.AC. 50/60Hz from plug pak (mains adaptor). Do not exceed 25V.AC. input. **Up to 20V.DC. input can be used, but only the positive half of the output will be active.**
- **OUTPUT - If AC is used as the input:** Dual output, +/- 1.2 – 20V.DC. regulated at 200mA continuous
- **OUTPUT - If DC is used as the input:** Single output, 1.2 – 20V.DC. regulated at 200mA continuous
- **Protection:** The DC output is automatically protected by the internal electronics. If the output current is exceeded, the output voltage will reduce automatically to protect the circuitry.
- **Regulation:** Better than 1% voltage fluctuation from no load to full load.
- **Ripple and noise:** Better than 10mV ripple and noise at full load

Metering: The moving coil meter on the front panel indicates the output voltage of one half of the output.. The other half of the output is always the same voltage but in the opposite polarity.

NOTE: If the input voltage is low, the output may not achieve 20volts. For 20 volts output, an input of 20V.AC is required. **Do not exceed 25V.AC input.**

Physical: 137x75x65mm LxWxH **Weight:** 0.37 kg.

Designed and manufactured in Australia

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