



POWER SUPPLY - regulator module

Cat: LQ2645-001 12V.AC/DC input, 1.2-20V.DC reg.output 1A

DESCRIPTION:

The IEC **Regulator Module** is a useful instrument that converts any AC or DC power source into a regulated, adjustable and metered power source at up to 1 amp. It is ideal for performing electronic experiments and can make the purchase of more expensive regulated power supplies unnecessary. IEC makes two types of regulator modules and the picture below shows the 1.2 – 20V.DC. model The LB2645-001 is powered through 4mm sockets on the front panel or can be powered from a standard 240/12V.AC. plug pak..

LQ2645-001 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:** 12V.AC. 50/60Hz or DC.

- **OUTPUT:** 1.2 – 20V.DC. regulated at 1 Amp 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.

NOTE: If the input voltage is low, the output may not achieve 20volts. For 20 volts output, an input of close to 14V.AC is required. **Do not exceed 20V.AC input.**

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

Designed and manufactured in Australia

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