

**I.C. REGULATED MULTI-OUTPUT
POWER SUPPLY
(CONSTANT VOLTAGE/CONSTANT CURRENT)
OMEGA TYPE MOP-1**

OMEGA manufacture the widest range of all I.C. regulated Power Supplies characterised by their built in reliability and trouble free operation over years. These precisely regulated Power Supplies can be operated either in constant voltage or in constant current mode of operation with automatic cross over characteristics. All supplies are protected against over load & short circuit.



FEATURES

- 01 Low cost general purpose laboratory bench units.
- 02 Uses ICs & silicon devices for high reliability & long life.
- 03 Automatic cross over from CV to CC mode.
- 04 Fully protected against over load and short circuit.
- 05 Better regulation and low ripple.
- 06 Automatic reset after removal of load.
- 07 Output voltage and current fully metered/ specified.
- 08 Continuously adjustable voltage & current limit.
- 09 Can be supplied with over voltage protection at an extra cost.
- 10 Electrical floating outputs with respect to ground.
- 11 Compact, Robust and light in weight with attractive front panel.

APPLICATIONS

I.C. Regulated Multi-output Variable Power Supply can be used for conducting experiments in Telecommunication, Engineering, Industrial Electronics, Nuclear Sciences, Servo Systems, Analogue and Digital Computers, Logic Circuits, D.C. Amplifiers, Calibration of Electrical Meters and Instruments, Educational Institutes etc.

The Constant Current mode of operation can be particularly used to explain ohms law, to test electro-mechanical components like relays and also to conduct electromagnetic experiments. Values of low resistors can be found. The supplies can be used to replace lead acid batteries.

As the output impedance is very low, it can be used for more than one circuit without fear of interaction due to the common impedance of the power supply provided the maximum current limit is not exceeded.

GENERAL SPECIFICATION

- 01 Output D.C. Voltage/ Current : 0 - 30V / 0 - 2 A with output voltage and current control.
- 02 Output D.C. Voltage/ Current : 0 - 15V / 0 - 1 A with output voltage and current control.
- 03 Output D.C. Voltage/ Current : 0 - 15V / 0 - 1 A with output voltage and current control.
- 04 Output D.C. Voltage/ Current : 0 - 6V / 0 - 2A with output voltage and current control.

01 Meters :

- 01 DPM having 4 seven segment LED Display of 12.5mm heights .
- 02 Automatic polarity and zero indication.
- 03 Over range indication is available.
- 04 Three lease significant digits get blanked in over range condition.
- 05 Accuracy $\pm 0.2\% \pm 1$ Digit.

02 Display Dual Range:

- 01 Voltmeter/Current meter 1 each for 0-30V/ 0-2A, 0-15V/0-1Amp. 0-15V/0-1Amp. 0-6V/0-2Amp.

03 CONSTANT VOLTAGE OPERATION MODE

Load Regulation :

$\pm 0.1\% \pm 2$ mV for load change zero to full load.

Line Regulation :

$\pm 0.1\% \pm 2$ mV for $\pm 10\%$ line change from zero volts to maximum output.

Ripple & Noise : 1mVrms max. 20Hz - 20MHz.

04 CONSTANT CURRENT OPERATION MODE

Load Regulation :

$\pm 0.1\% \pm 250$ uA for load change in output voltage.

Line regulation :

$\pm 0.1\% \pm 250$ uA for $\pm 10\%$ line change from 0 volts to maximum outputs.

Ripple & Noise : 0.04% rms.

05 Mode Indication : LED indication for constant voltage / current limiting mode.

06 Output Polarity: Floating with respect to Ground.

07 Transient Response :

100 μ S to within 10mV of set O/P voltage for load change from 10% to 90%.

08 Stability : $\sim \pm 0.2\%$ plus 5mV in constant voltage mode.

(Total drift within 8 hours, after $\sim \pm 0.5\%$ plus 5mA in current limiting mode conditions with constant load. warm-up) under ambient temperature

09 Input Power : 230VAC $\pm 10\%$ 50Hz, single phase.

10 PROTECTION :

Overload and short circuit protection all the outputs.

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

OMEGA ELECTRONICS