



Omega Manufacture the widest range of all I.C. regulated Power Supplies characterized 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.
- 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.
- 12 L.T. & bias voltage is provided with high voltage supplies to perform the experiments on valves & tubes etc.

#### APPLICATIONS

I.C. Regulated Variable & Fixed Output Power Supplies 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 SPECIFICATIONS

**OUTPUT VOLTAGE & CURRENT :** Specified against each TYPE No.

**INPUT VOLTAGE :** 230V  $\pm$ 10%, 50Hz

#### 01 CONSTANT VOLTAGE OPERATION MODE.

##### Load Regulation :

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

##### Line Regulation :

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

#### 02 CONSTANT CURRENT OPERATION MODE

##### Load Regulation :

$\pm 0.1\% \pm 250\mu\text{A}$  for load change in output voltage.

##### Line regulation :

$\pm 0.1\% \pm 250\mu\text{A}$  for  $\pm 10\%$  line change from 0 volts to maximum outputs.

#### 03 Digital Metering :

Specified against each Type No.

#### 04 Temperature Co-efficient :

0.05% Plus 7mV / 1°C [After initial warm up of 30 minutes].

#### 05 Stability :

0.2% Plus 50mV [After initial warm up of 30 minutes under constant line, load and temp. conditions.

#### 06 Transient Recovery Time:

100 m Second [Recovery within regulation band for load changed from 10% to 90%]

#### 07 PROTECTION :

- ★ Automatic over load & short circuit protection.
- ★ Ripple Voltage : Less than 2mV rms.
- ★ L.T. Voltage : 6.3V & 12.5V A.C. at 1 Amp.
- ★ Bias Voltage :  $\pm 25\text{V}$ , at 10mA continuously variable
- ★ Applicable only for high voltage power supplies.

#### VARIABLE POWER SUPPLIES

The following types are **Variable** Power Supplies with above general specifications. The output voltage & current can be independently set at the desired level with a coarse and a fine control. Continuous reading of output voltage and current is done by two meters.

**CONTINUE .... 02**

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

## OMEGA ELECTRONICS

**VARIABLE POWER SUPPLIES WITH  
DIGITAL PANEL METERS (3½ DIGIT)**

OMEGA Type	Output Voltage	Output Current	Metering
ICV-6/3	0-6V	0-3Amp	2 DPMs
ICV-15/05	0-15V	0-500mA	2 DPMs
ICV-15/1	0-15V	0-1A	2 DPMs
ICV-15/2	0-15V	0-2A	2 DPMs
ICV-15/5	0-15V	0-5A	2 DPMs
ICV-15/10	0-15V	0-10A	2 DPMs
ICV-30/05	0-30V	0-500mA	2 DPMs
ICV-30/1	0-30V	0-1A	2 DPMs
ICV-30/2	0-30V	0-2A	2 DPMs
ICV-30/3	0-30V	0-3A	2 DPMs
ICV-30/5	0-30V	0-5A	2 DPMs
ICV-30/10	0-30V	0-10A	2 DPMs
ICV-60/1	0-60V	0-1A	2 DPMs
ICV-60/2	0-60V	0-2A	2 DPMs
ICV-60/5	0-60V	0-5A	2 DPMs
ICV-300/01	0-300V	0-100mA	2 DPMs
ICV-300/02	0-300V	0-200mA	2 DPMs



MP-5/2

OMEGA TYPE	Output Voltage	Output Current
<b>5V DC Digital I.C. Power Supplies</b>		
MP-5/2	5V ± 0.5V	2 Amp.
MP-5/5	5V ± 0.5V	5 Amp.
MP-5/10	5V ± 0.5V	10 Amp.
MP-5/20	5V ± 0.5V	20 Amp.

OMEGA TYPE	Output Voltage	Output Current
<b>12V DC Fixed Output Power Supplies</b>		
MP-12/2	12V ± 1.2V	2 Amp.
MP-12/5	12V ± 1.2V	5 Amp.
MP-12/8	12V ± 1.2V	8 Amp.
MP-12/10	12V ± 1.2V	10 Amp.

**IC REGULATOR POWER SUPPLIES (DUAL) WITH  
DIGITAL PANEL METERS (3½ DIGIT)**

ICVD-15/1	0-15V	0-1A	2 DPMs
	0-15V	0-1A	
ICVD-15/2	0-15V	0-2A	2 DPMs
	0-15V	0-2A	
ICVD-30/1	0-30V	0-1A	2 DPMs
	0-30V	0-1A	
ICVD-30/2	0-30V	0-2A	2 DPMs
	0-30V	0-2A	
ICVD-60/1	0-60V	0-1A	2 DPMs
	0-60V	0-1A	
ICVD-60/2	0-60V	0-2A	2 DPMs
	0-60V	0-2A	
ICVD-300/01	0-300V	0-100mA	2 DPMs
	0-300V	0-100mA	
ICVD-300/02	0-300V	0-200mA	2 DPMs
	0-300V	0-200mA	

<b>48V DC Fixed Output Power Supplies</b>		
MP-48/15	48V ± 2V	15 Amp.
MP-48/20	48V ± 2V	20 Amp.

OMEGA TYPE	Output Voltage	Output Current
<b>± 5V DC Dual Tracking Linear I.C. Power Supplies</b>		
MPD-5/05	± 5V ± 0.5V	500mA
MPD-5/1	± 5V ± 0.5V	1 Amp.
MPD-5/2	± 5V ± 0.5V	2 Amp.

OMEGA TYPE	Output Voltage	Output Current
<b>± 12V DC Dual Tracking Linear I.C. Power Supplies</b>		
MPD-12/05	± 12V ± 1.2V	500mA
MPD-12/1	± 12V ± 1.2V	1 Amp.
MPD-12/2	± 12V ± 1.2V	2 Amp.
MPD-12/3	± 12V ± 1.2V	3 Amp.

OMEGA TYPE	Output Voltage	Output Current
<b>± 15V DC Dual Tracking Linear I.C. Power Supplies</b>		
MPD-15/05	± 15V ± 1.5V	500mA
MPD-15/1	± 15V ± 1.5V	1 Amp.
MPD-15/2	± 15V ± 1.5V	2 Amp.
MPD-15/3	± 15V ± 1.5V	3 Amp.

**FIXED OUTPUT POWER SUPPLIES**

**OMEGA FIXED** power supplies have compact encasement ideally suitable for being used as Sub-assemblies in a system. 5V DC series are useful for circuit using digital ICs, 12V DC series are useful as battery substitutes & ±12V, ±15V DC dual tracking linear I.C. power supplies are useful for circuit using linear ICs. Having general specification but line regulation in CV mode is 0.05%.

**SIZES :- Normally in two sizes**

01 Dimension : W 290 x H 160 x D 265  
02 Dimension : W 425 x H 190 x D 315

**NOTE :** WE UNDER TAKE THE DEVELOPMENT OF POWER SUPPLIES AS PER YOUR REQUIREMENT.

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**OMEGA ELECTRONICS**