

# HM SERIES

## 300 WATT DC POWER SUPPLY

**FLEXIBLE HIGH PERFORMANCE**



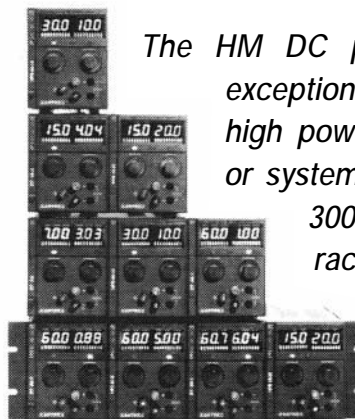
- Automatic crossover from constant voltage to constant current modes
- Excellent line and load regulation
- 300 Watts of output power
- Optional remote analogue, RS232 or GPIB programming interfaces

### Glassman HM Series DC Power Supply

The HM Series uses switch-mode technology combined with linear post regulation to provide performance comparable to an all-linear design. Excellent line and load regulation is matched by low noise and good transient response.

The HM Series is available in both single and dual formats for bench-top use. For systems applications, multiple units can also be rack mounted in one to four unit configurations for up to four independent 300 Watt outputs. These units can also be combined in mix and match rack combinations with other quarter rack XM or TM Series products.

MODEL	VOLTAGE	CURRENT
HM 15-20	0-15V	0-20A
HM 30-10	0-30V	0-10A
HM 60-5	0-60V	0-5A



The HM DC power supply is an exceptional product providing a high power density any bench or system application; It packs 300 Watts of power into a rack weighing less than 8 Pounds.

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# HM SERIES

## 300 WATT DC POWER SUPPLY

Internal computer interface cards give you all the control options you need and save bench/rack space. Mix with XM and TM models to add flexibility and higher power.



### Features

- Excellent regulation and transient response
- Mix and match with TM or XM Series
- Analogue, GPIB, RS232 programming
- Front and Rear panel dc connections

### Options & Accessories

- **AC I/P:** Standard AC220, Optional AC115, AC230, AC240
- **Mixed TM/XM/HM Units:** For further information on mixed XM/HM/TM units, contact Glassman Europe.
- **M11:** 10-turn Current Potentiometer
- **RM:** Rack Mount Kit
- **APG: Internal Analogue Programming Interface**  
Includes overvoltage protection (OVP), remote ON/OFF, master/slave Tracking.
- **GPIB: Internal GPIB Interface**  
Full feature GPIB programming with 16-bit resolution and software calibration
- **RS232: Internal RS232 Interface**  
Serial instrument programming using the RS232 protocol

### Specifications

Models	HM 15-20	HM 30-10	HM 60-5
<b>Output Ratings:</b>			
Output Voltage	0-15 V	0-30 V	0-60 V
Output Current	0-20 A	0-10 A	0-5 A
Output Power	300 W	300 W	300 W
<b>Line Regulation:<sup>2</sup></b>			
Voltage (0.01% of Vmax + 2 mV)	3.5 mV	5 mV	8 mV
Current (0.01% of Imax + 1 mA)	3 mA	2 mA	1.5 mA
<b>Load Regulation:<sup>3</sup></b>			
Voltage (0.01% of Vmax + 2 mV)	3.5 mV	5 mV	8 mV
Current (0.01% of Imax + 5 mA)	3 mA	2 mA	1.5 mA
<b>Meter Accuracy:</b>			
Voltage (1% of Vmax + 1 count)	0.25 V	0.4 V	0.7 V
Current (1% of Imax + 1 count)	0.3 A	0.2 A	0.06 A
<b>Output Noise and Ripple at rear output:</b>			
(20 Hz - 20 MHz) RMS	5 mV	5 mV	5 mV
P-P	100 mA	100 mA	100 mA

1 Specifications indicate typical performance at 25°C±5°C, nominal line input of 120VAC

Above 30°C, derate output linearly to zero at 70°C

2 For input voltage variation over the AC input voltage range, with constant rated load

3 For 0 to 100% load variation, with constant nominal line voltage

AC input: 198-242 Vac 47-63 Hz Maximum Voltage Differential from output to safety ground: 400Vdc

### Additional Characteristics

Models	HM 15-20	HM 30-10	HM 60-5
<b>Stability:<sup>4</sup></b>			
Voltage (0.02% of V max)	3 mV	6 mV	12 mV
Current (0.03% of I max)	6 mA	3 mA	1.5 mA
<b>Temperature Coefficient:<sup>5</sup></b>			
Voltage (0.015% of V max/°C)	2.25 mV	4.5 mV	9 mV
Current (0.02% of I max/°C)	4 mA	2 mA	1 mA

4 Drift over 8 hours after 60 minute warm up

5 Change in output per °C change in ambient temperature, with constant line and load

**Operating Ambient Temperature:** 0-30°C with default local sensing. Above 30°C, derate output linearly to zero at 70°C  
**Storage Temperature Range:** -55 to +85°C  
**Humidity Range:** 0 to 80% RH Non-condensing

**Front Panel Control:** 10-turn voltage and 1-turn current potentiometers (10-turn current control optional)  
**Front Panel Voltage Control Resolution:** 0.02% of V max

**Voltage Mode Transient Response Time:** <500µs recovery to 0.05% band for ±50% load change in the range of 25% to 100% of the rated load  
**Agency Approvals:** CSA, CE, FCC Part 15, Subpart J, Class A standards for radiated and conducted emissions

### Internal GPIB/RS232 Interface Specifications

Models	HM 15-20	HM 30-10	HM 60-5
<b>Program Resolution (16-bit):</b>			
Voltage	0.25 mV	0.5 mV	1.01 mV
Current	0.34 mA	0.17 mA	0.08 mA
OVP	0.25 mV	0.5 mV	1.01 mV
<b>Program Accuracy:</b>			
Voltage (0.2%+10mV)	40 mV	70 mV	130 mV
Current (0.3%+10mA)	70 mA	40 mA	25 mA
OVP (0.5%+100mV)	175 mV	250 mV	400 mV
<b>Readback Resolution (16-bit):</b>			
Voltage	0.25 mV	0.5 mV	1.01 mV
Current	0.34 mA	0.17 mA	0.08 mA
<b>Readback Accuracy:</b>			
Voltage (0.2%+20mV)	50 mV	80 mV	140 mV
Current (0.3%+20mA)	80 mA	50 mA	35 mA

### Dimensions

