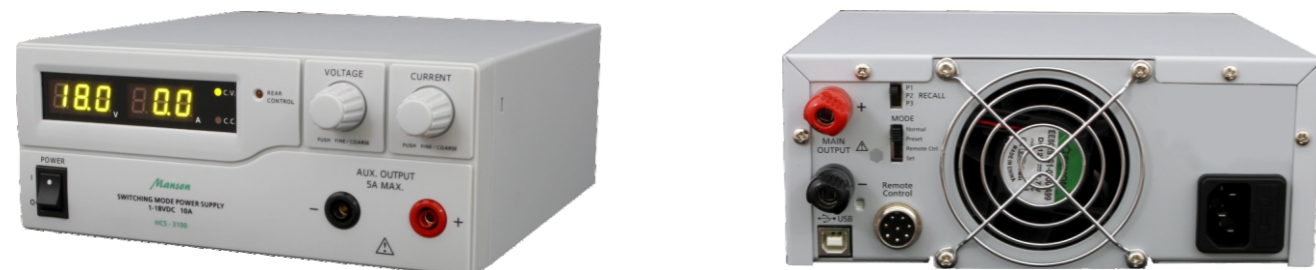


Description

This range of high graded SMPS is designed for a wide range of applications for telecommunications, laboratory and industry. The power efficient circuit designs allow units to have small form factor with low profile and small footprint casings. The intelligent fan speed control program checks the fan at power on and adapts the right speed to ensure a quiet and safe operation of the power supply at different ambient temperatures and power output levels. The dual action (coarse & fine set) control knobs make tuning the voltage and current level ever so smooth, precise and fast, due to the rotary encoder and microprocessor control. Setting the CC current limiting can be done in open circuit at output poles. The isolated ground construction allow parallel and series connection of power supplies with ease and safety. The three user defined presets of voltage and current limiting levels facilitate quick access to frequently used VI settings. Analogue remote control functionality offer a wide range of operation possibilities for the industrial and more sophisticated users.

Features

- Remote Programmable via USB to computer.
- 20 programmable sets of V, I & cycle periods for repetitive operation up to 999 cycles.
- 3 user defined V & I panel presets for frequent use.
- Analogue Remote Control of V, I, & output On-Off without computer.
- Rotary encoder knob with definitive action of fine and coarse tuning.
- Smart cooling fan speed control from zero to full speed.
- Self diagnostic check on LED display and cooling fan on start up.
- Isolated ground, Active PFC & high power efficiency.
- Over load, Tracking Over Voltage Protections.
- Constant Current limit setting with output open circuit.



General Specifications

Voltage Meter Type & Accuracy	3digit LED display ±(0.2% +3counts)
Current Meter Type & Accuracy	3digit LED display ±(0.2% +3counts)
Input Voltage	90-264VAC 50/60Hz~ (HCS-31XX, 32XX) 180-264VAC 50/60Hz~ (HCS-33XX, 34XX, 36XX)
Power Factory Control	Power factor correction >0.95 at optimal load
Cooling Method	Thermostatic Control Fan from Zero to full speed
Protection	Overload, Short Circuit by Constant Current, Output Tracking Over Voltage, Over Temperature
Special Features	3 User defined V & I preset, Analogue Remote control V, I and output on-off, Remote Sensing (only for HCS-3600)
Preset Cycle Programming	Max. 20 presets of V & I, Max. preset time 100 minutes (99min + 60sec), Max. preset cycle 999
Approvals	CE EMC: EN 55011, 55022 LVD: EN 60950, 61010
Dimension (WxHxD)	200x80x208 mm 7.8x3.2x8.2 inch (HCS-31XX, 32XX) 200x90x215 mm 7.9x3.5x8.5 inch (HCS-33XX, 34XX) 200x90x275 mm 7.9x3.5x10.8 inch (HCS-36XX)
Weight	2.4 kg 5.2 lbs (HCS-31XX, 32XX) 2.6 kg 5.7 lbs (HCS-33XX, 34XX) 3.2 kg 7.0 lbs (HCS-36XX)

* All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.

* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

Specifications

Models	HCS-3100	HCS-3102	HCS-3104
Output			
Variable Output Voltage	1-18VDC	1-36VDC	1-60VDC
Variable Output Current	0-10A	0-5A	0-2.5A
Voltage Regulation			
Load (10-100% Rated Current)	≤50mV		
Line (90-264VAC Variation)	≤20mV		
Current Regulation			
Load (10-90% Rated Voltage)	≤100mA		
Line (90-264VAC Variation)	≤50mA		
Ripple & Noise			
Ripple & Noise (r.m.s.) Voltage	≤5mV		
Ripple & Noise (peak-peak) Voltage	≤50mV		
Switching Frequency	100-120KHz~		
Tracking Over Voltage Protection	O/P 1-5V: set voltage +2V O/P 5-18V: set voltage +3V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-36V: set voltage +4V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-60V: set voltage +4V
Full Load Input Current (230VAC/ 100VAC)	1.2/ 2.4A	1.2/ 2.5A	1.0/ 2.0A
Efficiency (230VAC)	≥83%		

Models	HCS-3200	HCS-3202	HCS-3204
Output			
Variable Output Voltage	1-18VDC	1-36VDC	1-60VDC
Variable Output Current	0-20A	0-10A	0-5A
Voltage Regulation			
Load (10-100% Rated Current)	≤50mV		
Line (90-264VAC Variation)	≤20mV		
Current Regulation			
Load (10-90% Rated Voltage)	≤100mA		
Line (90-264VAC Variation)	≤50mA		
Ripple & Noise			
Ripple & Noise (r.m.s.) Voltage	≤5mV		
Ripple & Noise (peak-peak) Voltage	≤50mV		
Switching Frequency	100-120KHz~		
Tracking Over Voltage Protection	O/P 1-5V: set voltage +2V O/P 5-18V: set voltage +3V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-36V: set voltage +4V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-60V: set voltage +4V
Full Load Input Current (230VAC/ 100VAC)	2.1/ 4.6A	2.1/ 4.6A	1.7/ 3.8A
Efficiency (230VAC)	≥85%	≥86%	≥86%

Models	HCS-3300	HCS-3302	HCS-3304
Output			
Variable Output Voltage	1-16VDC	1-32VDC	1-60VDC
Variable Output Current	0-30A	0-15A	0-8A
Voltage Regulation			
Load (10-100% Rated Current)	≤50mV		
Line (180-264VAC Variation)	≤20mV		
Current Regulation			
Load (10-90% Rated Voltage)	≤150mA	≤100mA	≤100mA
Line (180-264VAC Variation)	≤50mA		
Ripple & Noise			
Ripple & Noise (r.m.s.) Voltage	≤5mV		
Ripple & Noise (peak-peak) Voltage	≤50mV		
Switching Frequency	65-85KHz~	75-95KHz~	65-85KHz~
Tracking Over Voltage Protection	O/P 1-5V: set voltage +2V O/P 5-16V: set voltage +3V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-32V: set voltage +4V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-60V: set voltage +4V
Full Load Input Current (230VAC)	2.4A		
Efficiency	≥85.5%	≥86.5%	≥87%
USB Port	Yes (or on request)		

* All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.

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REMOTE PROGRAMMING LABORATORY GRADE POWER SUPPLY

HCS-Series

Models	HCS-3400	HCS-3402	HCS-3404
Output			
Variable Output Voltage	1-16VDC	1-32VDC	1-60VDC
Variable Output Current	0-40A	0-20A	0-10A
Voltage Regulation			
Load (10-100% Rated Current)	≤50mV		
Line (180-264VAC Variation)	≤20mV		
Current Regulation			
Load (10-90% Rated Voltage)	≤150mA	≤100mA	≤100mA
Line (180-264VAC Variation)	≤50mA		
Ripple & Noise			
Ripple & Noise (r.m.s.) Voltage	≤5mV		
Ripple & Noise (peak-peak) Voltage	≤50mV		
Switching Frequency	65-85KHz~	75-95KHz~	65-85KHz~
Tracking Over Voltage Protection	O/P 1-5V: set voltage +2V O/P 5-16V: set voltage +3V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-32V: set voltage +4V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-60V: set voltage +4V
Full Load Input Current (230VAC)	3.15A	3.1A	3.1A
Efficiency	≥85.5%	≥87%	≥89%
USB Port	Yes (or on request)		

Models	HCS-3600	HCS-3602	HCS-3604
Output			
Variable Output Voltage	1-16VDC	1-32VDC	1-60VDC
Variable Output Current	0-60A	0-30A	0-15A
Voltage Regulation			
Load (10-100% Rated Current)	≤50mV		
Line (180-264VAC Variation)	≤20mV		
Current Regulation			
Load (10-90% Rated Voltage)	≤200mA	≤150mA	≤100mA
Line (180-264VAC Variation)	≤50mA		
Ripple & Noise			
Ripple & Noise (r.m.s.) Voltage	≤5mV		
Ripple & Noise (peak-peak) Voltage	≤50mV	≤50mV	≤100mV
Switching Frequency	65-85KHz~	75-95KHz~	65-85KHz~
Tracking Over Voltage Protection	O/P 1-5V: set voltage +2V O/P 5-16V: set voltage +3V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-32V: set voltage +4V	O/P 1-5V: set voltage +2V O/P 5-20V: set voltage +3V O/P 20-60V: set voltage +4V
Full Load Input Current (230VAC)	4.7A	4.5A	4.5A
Efficiency	≥86.5%	≥90%	≥90%
USB Port	Yes (or on request)		

Accessories



AC Power Cord



CDROM
include user manual,
USB driver and
PC control software



USB Cable



User Manual



Metal 8Pin
Female Connector

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