HCS-3100 Series with USB

Laboratory Grade & High RFI Immunity Switched Mode Power Supply

USB port

Description

This series of high graded SMPS is designed for a wide range of applications in telecommunications, electronics, industry and research. The high efficiency circuit design allows all units to have a small form factor with low profile and small footprint. The intelligent fan speed control checks the fan at power on and then adapts the 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 current limit can be performed with open circuit outputs. The isolated ground construction allows 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. The full analogue remote control functionality and USB control with software offers a wide range of applications in R&D, Production Product Evaluation or QC testing and automated test equipment (ATE).

Features

- **Remotely controlled via computer.**
- 20 repeatable V and I step sequence software with V and I data logging capability. Labview driver and example programs in VisualBasic and VBA for Word and Excel are provided.
- **New! Android & iPad Apps!**
- Rotary encoder controls with coarse and fine tuning
- 3 user defined Voltage and Current presets
- Full Remote Control of V, I, t and output on-off
- High RFI immunity and excellent EMI
- Isolated ground, Active PFC and high efficiency
- Intelligent fan control from zero to full speed
- Over Load, Over Temperature & Tracking Over Voltage Protection.

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	≤100mA	≤100mA
Line (90~264VAC Variation)	≤50mA		
Ripple & Noise			
Ripple & Noise (rms) Voltage	≤5mV	≤5mV	≤5mV
Ripple & Noise (peak-peak) Voltage	≤50mV	≤50mV	≤50mV
Switching Frequency	100~120kHz	100~120kHz	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
Meter Type & Accuracy			
Voltage Meter	3 Digit LED Display ±(0.2% + 3 counts)		
Current Meter	3 Digit LED Display ±(0.2% + 3 counts)		
Input Voltage	90~264VAC 50/60Hz		
Full Load Input Current (230VAC/100VAC)	1.2A/2.4A	1.2A/2.5A	1.0A/2.0A
Efficiency (230VAC)	≥83%	≥83%	≥83%
Power Factor 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 limiting, Output Tracking Over Voltage, Over Temperature		
Special Features	3 User defined V and I preset, Remote control V, I and output on-off, USB port control with software and drivers provided		
Approvals	CE EMC: EN55011, EN55022 LVD: EN60950, EN61010		
Dimensions (WxHxD)	200x80x208mm 7.8x3.2x8.2in (10mm or 0.39in rubber feet included)		
Weight	2.4kg 5.2lb (3kg 6.6lb in carton)		

● All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.
● SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE