

## HCS-Series

Laboratory Grade & High RFI Immunity Switching Mode Power Supply with Rotary Encoder Control



HCS-Series  
Dark grey  
(pantone 426C)



HCS-Series  
Light grey  
(pantone 428C)

### 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 V/I settings. The full remote control functionality offer a wide range of operation possibilities for the industrial and more sophisticated users.

### Features

- Rotary Encoder Control Knob with coarse & fine tuning
- 3 user defined V & I presets (recalls)
- Full Remote Control of V, I and output on-off
- High RFI immunity & excellent EMI
- Isolated ground ,Active PFC & high power efficiency
- Intelligent fan control from zero to full speed
- Over load, Over Temperature & Tracking Over Voltage protections

### Specifications

| Models                             | HCS - 3400  | HCS - 3402  | HCS - 3404  |
|------------------------------------|---|---|---|
| <b>Output</b>                      |   |   |   |
| Variable Output Voltage            | 1 - 15VDC   | 1 - 30VDC   | 1 - 60VDC   |
| Variable Output Current            | 0 - 40A   | 0 - 20A   | 0 - 10A   |
| <b>Voltage Regulation</b>          |   |   |   |
| Load (10 - 100% Load)              | 50mV  |   |   |
| Line (170 - 264VAC Variation)      | 20mV  |   |   |
| <b>Current Regulation</b>          |   |   |   |
| Load                               | 150mA   | 100mA   | 100mA   |
| Line (170 - 264VAC Variation)      | 50mA  |   |   |
| <b>Ripple &amp; Noise</b>          |   |   |   |
| Ripple & Noise (r.m.s.) Voltage    | 5mV   | 5mV   | 5mV   |
| Ripple & Noise (peak-peak) Voltage | 50mV  | 50mV  | 100mV   |
| Switching Frequency                | 65 - 85Khz~   | 75 - 95Khz~   | 65 - 85Khz~   |
| Tracking Over Voltage Protections  | O/P 1-5V : set voltage +2V<br>O/P 5-15V : set voltage +3V                                   | O/P 1-5V : set voltage +2V<br>O/P 5-20V : set voltage +3V<br>O/P 20-30V : set voltage +4V | O/P 1-5V : set voltage +2V<br>O/P 5-20V : set voltage +3V<br>O/P 20-60V : set voltage +4V |
| <b>Meter Type &amp; Accuracy</b>   |   |   |   |
| Voltage Meter                      | 3 Digit LED Display $\pm 0.2\%$ +3counts  |   |   |
| Current Meter                      | 3 Digit LED Display $\pm 0.2\%$ +3counts  |   |   |
| Input Voltage                      | 200 - 240VAC 50/60Hz~ (or on request)   |   |   |
| Full Load Input Current            | 3.15A   | 3.1A  | 3.1A  |
| Efficiency                         | 85.5%   | 87%   | 89%   |
| Power Factor Control               | Power factor correction >0.95 at optimal load   |   |   |
| Cooling Method                     | Thermostatic Control Fan from Zero to full speed  |   |   |
| Protections                        | Overload, Short Circuit by Constant Current, Output Tracking Over Voltage, Over Temperature |   |   |
| Special Features                   | 3 User defined V & I preset, Remote control V, I and output on-off                          |   |   |
| Approvals                          | CE EMC: EN 55011, 55022 LVD: EN 60950, 61010  |   |   |
| Dimensions (WxHxD)                 | 200x90x215 mm 7.9x3.5x8.5 inch  |   |   |
| Weight                             | 2.6 kg 5.7 lbs  |   |   |

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

■ SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE