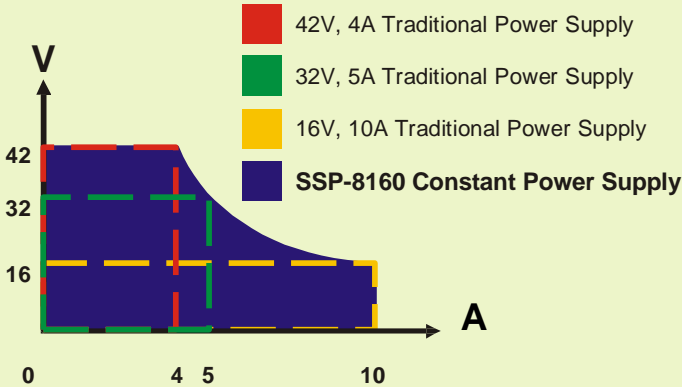


USB REMOTE PROGRAMMING LABORATORY GRADE POWER SUPPLY

160W Constant Power (Auto-Range) Switched Mode Power Supply **SSP-8160 / SSP-8162**



Manson®



Description

A conventional power supply has a set max voltage and a set max current such that all the operating V & A must fall inside these limits. For example a 20V max. and 8A max. power supply with 160W can only supply voltage and current within the above two limits of V & A. If you require 40V with a smaller current (4A) or 10A with lower voltage (16V) you would need to buy another power supply!

This completely new design of laboratory grade power supply differs from the conventional power supply by calculating and changing the voltage and current limit points according to the power available. The maximum limits of voltage and current are changed according to the rated power. In the above example, a constant-power supply can supply 16V at 10A or 42V at 4A etc. The combinations of maximum V and I are greatly increased and so is the range of operational limits as shown in the hyperbolic graph of maximum power voltage-ampere.

The key benefit is clear. It saves money as one constant-power power supply can do the job of multiple conventional power supplies.

Features

- Saves money and space as one power supply covers the V, A limits of multiple power supplies.
- Adjustable output current and voltage levels to ensure safe operation.
- 3 user presets of frequently used V and A outputs
- 4 digit display of voltage and current
- Analogue Remote Control of V, I and Output On/Off
- Ramp, Step, DC output with 3 presets
- Remote Programming via USB port with software & drivers provided, Labview and programs in other languages (e.g. VBA) available.
- Remote Sensing for remote point of regulation
- Output on-off switch and control panel lock button for safer operation
- Over-Temperature, Over-Current, Over-Voltage and Short-Circuit Protection
- Universal Input 90~264VAC, 50~60Hz

Specifications

Models	SSP-8160	SSP-8162
Input Voltage Range	100~240VAC	
No Load Input Current at 230VAC/100VAC	≤200mA/ ≤220mA	
Full Load Input Current at 230VAC/100VAC	≤1.0A / ≤2.3A	
AC Input Frequency	45~65Hz	
Efficiency (230VAC/100VAC)	≥86/84% @ 42V/3.8A	≥86/85% @ 84V/1.9A
Power Factor	≥0.91 at optimal load	
OUTPUT:		
Variable Output Voltage	0~42V	0~84V
Variable Output Current	0~10A	0~5A
Output Rated Power	160W	
Constant Voltage Characteristics:		
Load Regulation (10~100% rated current)	≤50mV	
Line Regulation (90~264VAC)	≤10mV	
Ripple & Noise (peak-peak)	≤50mVp-p	≤60mVp-p
Ripple & Noise (rms)	≤5mV	≤6mV
Constant Current Characteristics:		
Load Regulation (10~90% rated voltage)	≤50mA	
Line Regulation (90~264VAC)	≤10mA	
Meter Accuracy		
Voltage Meter Accuracy (V)	±(0.1% + 5 counts)	
Current Meter Accuracy (A)	±(0.1% + 5 counts)	
Resolution	0.02V 0.01A	
Output Setting Accuracy	Voltage: ±(0.2% + 5 counts) Current: ±(0.2% + 5 counts)	
Transient Response Time (step: 50~100% rated load)	≤1.5ms	
Protection	Adjustable upper voltage limit, Short circuit, Overload, Over temperature, Adjustable upper current limit, Tracking OVP	
Output Terminals	Safety Jacks on Front Panel	
Additional Functions	3 User defined V & I presets, Analogue Remote Control V, I & on-off	
Remote Programmable via USB to Computer	Max. 20 preset of V & I, Max. preset cycle 999 (supplied software)	
Ramp & Step Irregular Waveform Functions	Yes	
Approvals	CE EMC: EN55011 LVD: EN61010	
Cooling Method	Natural Convection	
Operating Temperature	0°C ~ 40°C	
Dimensions (WxHxD)	200x95x245mm 7.9x3.7x9.5in	
Weight	2.5kg 5.5lb (3.4kg 7.5lb in carton)	
Supplied Accessories	User Manual, CDROM, USB cable, pair of output leads with croc. clips	

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

• SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE