

Remote Programmable Constant Power Switching Mode power supply with Ethernet Network Connectivity / 3 DC Voltage Ramp Generators / 32 bit MCU

SSP - 8080 Next Generation Power Supply

Description

The constant power design allows a much wider range of output current and voltage than the most power supplies in the same category. The 3 voltage and current range selections in effect is like having 3 power supplies with different output range.

An advanced ARM construction RISC 32bit Micro-Processor is used to provide the following unique features .

Three unique voltage generators and remote programming of accurate voltage and current, data logging of output voltage and current.

Through the various combinations of the settings in the time gradient and the duration of the voltage generators, miscellaneous repeatable ramp up / down, step, irregular wave form of output voltages can be generated from values of V , I & ΔT .

It is ideal for R&D, education, production, burn-in test especially for devices when the effect of irregular dc input is critical.

The standard communication port provided is USB1.1 which can be connected to your personal computer. Remote Control functions like output on-off, voltage and current adjustment, selection of voltage and current ranges can be done through your PC .

With the Ethernet control board (optional) and the ETHERNET /USB router, connection to LAN or WAN network is made possible. One PC can remotely control and monitor 250 power supplies with C type Ethernet and more for B and A type networks.

It opens the door to use with all sorts of control and monitor software in cycling and output data acquisition even through the internet.

We provide application software, USB driver, command sets, Ethernet setting software, and Labview® driver for Ethernet .

This Ethernet / Internet ready SMPS is the dream power supply for the network savvy engineers to have the controls, monitoring and output data logging to be done via the internet in real time situation.

Features

Electrical

- ** Switching Mode Power Supply with Dynamic PFC
- ** 80W Constant Power Supply in 3 selectable ranges: 0~16V/0~5A ; 0~27V/0~3A ; 0~30V/0~2.2A
- ** Adjustable Upper Current and Voltage Limits in addition to the tracking OVP and CC.
- ** Separate indicator for Upper Current and Voltage Limits and Over Temperature
- ** 4 digit LED meter displays and output on/off switch
- ** Coarse and fine tune selection
- ** 3 sets of user preset V and I Recalls (A, B, C), for quick access of frequent V& I settings.
- ** Key pad lock and unlock function
- ** Remote sensing for accurate applied voltage at load point

DC Ramp, Step & Irregular Wave Function

- ** 3 sets of Voltage Generators with 0 to 600 seconds output time
- ** Preset time period from one Voltage Generator to another is 0 to 20 seconds
- ** Any 2 Voltage Generators can merge to form ramp up, ramp down Step, Irregular waveform, in various duty cycles.

Remote Program & Network connectivity

- ** Remote control and programming of output on off, voltage & current setting, Choice of power supply range , and data logging to PC.
- ** USB1.1 port for PC interface with Ethernet router to Lan or Wan network and to the internet.
- ** One PC can control and monitor over 250 power supplies in the C Ethernet
- ** Supply of application software, USB driver, command sets, Ethernet setting software and Labview® driver for Ethernet.

Specifications

Input AC Voltage Range	SSP - 8080	
No load Input Current at 230Vac	100 - 240Vac	
Full Load Input Current at 230Vac	≤0.1A	
AC Input Frequency	≤0.5A	
Efficiency	47 - 63Hz~	
Power Factor	≥75%	
Constant Voltage and Current Range Selection:	≥0.9	
0-16V / 5A Range I	0 - 16.4V	0 - 5.1A
0-27V / 3A Range II	0 - 27.6V	0 - 3.1A
0-36V / 2.2A Range III	0 - 36.8V	0 - 2.3A
Constant Voltage Characteristics :		
Load Regulation (0-100%)	≤20mV	
Line Regulation (±10%)	≤4mV	
Ripple & Noise (peak to peak)	≤30mV	
Constant Current Characteristics :		
Load Regulation (0-100%)	≤10mA	
Line Regulation (±10%)	≤10mA	
Meter Accuracy :		
Voltmeter and Ammeter Accuracy	±1% +2 counts	
User Adjustable Upper Current and Voltage Limits	Yes	
Number of Preset Recalls of Frequent use V&I Setting	3	
Remote Sensing	Yes	
Ramp Step Irregular Waveform Functions		
Number Voltage Generators ($\Delta V / \Delta t$)	3 (A, B, C)	
Available Number of Combinations of Voltage Generators	6 (AB, BA, AC, CA, BC, CB)	
Settable Output Time Period of each Voltage Generator	0 to 600 seconds	
Settable Time Period one Voltage Generator to another	0 to 20 seconds	
Remote Programmable / Control by PC	Output ON/OFF, Voltage & Current Control, Selection of Voltage and Current Range, Programmable of cyclic output and data logging of output	
Protection	Adjustable Over Voltage Protection, Current Limiting Protection, Short Circuit, Overload, Over Temperature Protection	
Standard Communication Port	USB 1.1	
Optional Interface Accessory	Ethernet Control Broad (ZNE-100PT) Factory Pre-installed or User Installable	
Provided Software	USB Driver, Command Sets, Ethernet Setting Software, Labview® Driver for Ethernet	
CE Approvals	LVD : EN 61010 , EMC : EN 55011	
Cooling	Natural Convection	
Dimensions in mm (WxHxD)	53.5 x 127 x 330mm / 2 x 5 x 13inch	
Weight in Kg	Approx. 1.9Kgs / 4.2Lbs	



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

* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE *