REMOTE PROGRAMMING LABORATORY GRADE POWER SUPPLY
HRZ-80

Horizon Electronics Ltd
Power Systems

Description

Remote Programmable Constant Power SMPS with DC wave forms & Optional Ethernet Card.
This multi-function constant power laboratory grade power supply is capable of generating various DC wave forms.
A micro-processor is used for such DC waveform. There are 10 voltage generators which can either be panel programmed or by PC via remote control port.
Remote Programming of repetitive cycling, control, monitoring and data logging can be done via the USB port.

With optional Ethernet card it is capable of Internet connectivity and control , monitor, data log over 250 supplies by one PC. Application software of cyclic program , command sets , and Labview Drivers are provided. As a 80W Constant Power laboratory grade power supply it has an automatic range of 0.5- 36V and 0 -5A.

The maximum limits of current & voltage are calculated by Imax x Vmax = 80W.
Its operation voltage and current spectrum is larger than 3 conventional power supplies of the same power rating.
The power supply is ideal for R&D laboratory, burn in test especially for devices where the effect of irregular DC wave forms are important.
Master & Slave configuration with HR-80 and HRZ-80 for parallel connection of multiple units up to 30 Units.

Features

DC Ramp, Step & other Wave form generation
- 10 sets of voltage generators with 0 to 1200 seconds output time.
- Merging of any two generators to form DC wave form.
- Can be done on unit from panel or by PC via USB.

Remote Programming & Ethernet connectivity
- Remote setting of DC wave form generation with graphic display on PC.
- Remote Programming of repetitive cycling, control, monitoring & data log by PC.
- Optional Ethernet Card allow above remote programming features through internet by iPad or Tablets.

Electrical
- Universal Input 100-264Vac, 50-60Hz.
- Auto range Constant Power SMPS with maximum 80W output.
- Support output Voltage range from 0.5 to 36V.
- Support output Current range from 0 to 5A.
- Adjustable upper voltage and current output levels to ensure safe operation.
- 3 user presets of frequently used V and A outputs.
- Master/Slave configuration for synchronization of the parallel connected output of multiple units.
- 4 digit display of voltage and current.
- 10mV adjustment resolution for output Voltage.
- 10mA adjustment resolution for output Current.
- Output on-off switch and control panel lock button for safer operation Remote Sensing.
- Over Temperature, Over Current, Over Voltage and Short Circuit Protection

Optional Accessory
- Ethernet card
- 10/100Mbps Ethernet
- Factory or User install
- Remote configurable by tool program

Specifications

Model	HRZ-80
Input Voltage Range	100 - 240VAC
No Load Input Current at 230VAC	≤0.13A
Full Load Input Current at 230VAC	≤0.5A
AC Input Frequency	50 - 60Hz~
Efficiency	≥78%
Power Factor	≥0.9
Constant Voltage and Current Range Selection:	
0.5-36V / 0-5A	Auto range with maximum output power 80W (V x A ≤80)
Constant Voltage Characteristics:	
Adjust Resolution	10mV
Load Regulation (0 - 100%)	≤30mV
Line Regulation (±10%)	≤4mV
ConstRipple & Noise (peak-peak)	≤35mV
Constant Current Characteristics:	
Adjust Resolution	10mA
Load Regulation (0 - 100%)	≤10mA
Line Regulation (±10%)	≤10mA
Voltmeter & Ammeter Accuracy	±0.5% +5counts
User adjustable upper current & voltage limits	Yes
Number of preset recalls of frequent use V&I setting	3
Remote Sensing	Yes
Ramp Step Irregular Waveform Functions	
Number Voltage Level Setting	10
Settable Output Time Period of each Voltage Level	0 to 1200 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	Over voltage protection, Current limiting protection, Short circuit, Overload, Over temperature
Standard Communication Port	USB 2.0
Optional Interface	Ethernet Control, Factory or User install
Additional Function	Master / Slave Control
Approvals	CE EMC: EN 55011 LVD: EN 61010
Cooling Method	Natural Convection
Dimensions (WxHxD)	53.5x127x330 mm 2x5x13 inch
Weight	Approx. 1.9 kgs 4.2 lbs

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