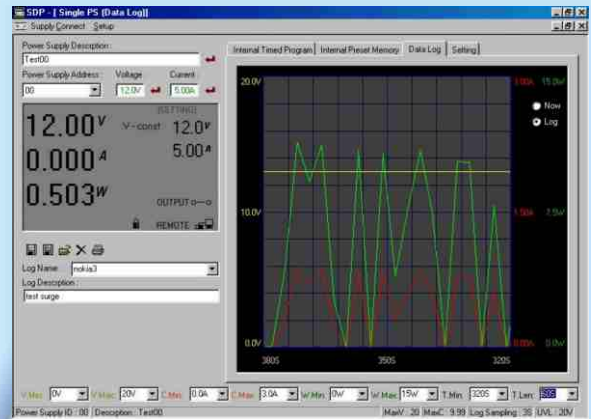


# SWITCHING MODE PROGRAMMABLE DC regulated power supply

SDP - 2210 / 2405 / 2603

Manson



## Description

We integrate the micro-controller technology and our proprietary software to make this series is a user friendly, time saving, versatile and bi-directional, programmable power supply with good old-fashioned reliability.

In the PC interface mode : 1)Output for even dynamic loading can be recorded, stored and displayed in the PC. 2)The PC can input, store, retrieve and transfer bi-directionally groups of data entries of Timed Programs and Presets to the power supply.

The informative backlit LCD display guides user through various operation procedures interactively. In addition to the OVP, upper limit of output voltage can be user preset to further protect low voltage applications.

It is ideal for applications which require lots of repetitive settings in output voltage, current with various running time and operation cycles.

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## Main Features

- Nine preset of voltage and current outputs.
- In Time Program Mode, 20 subprogramms each with preset voltage, current limit, operation time period and repetitive cycle runs.
- Tracking OVP Output Over-voltage Protection.
- UVL user adjustable upper voltage limit.
- CC & CV indicators with auto-cross over.
- User re-calibration without opening case in PC interface mode.
- Built-in RS-232 and RS-485 interface which can control up to 31 units.
- Bi-directional PC interface for remote Preset, Timed Program & data logging.
- Supplied with proprietary software for (Window™) operating systems.

## SPECIFICATIONS

SDP - 2210

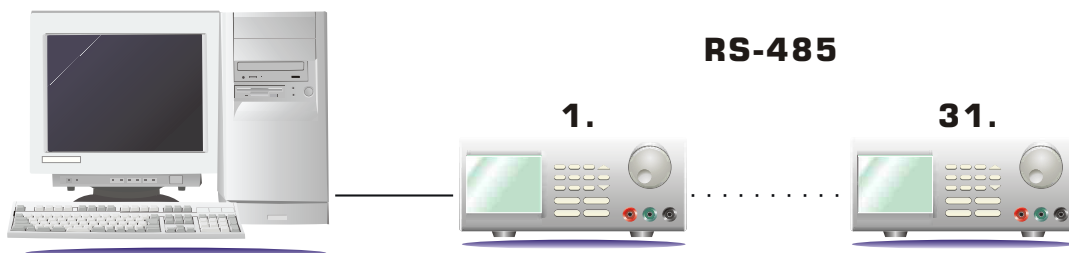
SDP - 2405

SDP - 2603

Output Voltage	1 - 20V DC	1 - 40V DC	1 - 60V DC
Output Current	0 - 10A	0 - 5A	0 - 3.3A
Ripple & Noise (P-P)	25mV		
Load Regulation	0.5% +200mV	0.5% +100mV	0.5% +100mV
Line Regulation	50mV		
Input Voltage	90 - 265VAC , 50Hz / 60Hz		
Display Meter	4 digit - display LCD ammeter , voltmeter and power meter		
Meter's Accuracy	1.5% +2 counts		
LCD Module	Back light : dim 48 x 66mm		
Cooling System	thermostatic control fan		
Protection Devices	Over Temperature , OVP , Short Circuit		
Approvals	CE		
Dimension (WxHxD)	193 x 98 x 215 (mm)		
Weight	3 KG		
Accessory	PC Windows™ software , RS-232 cable and user's manual		
Remarks	Bi-directional PC interface, data logging		

\* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE \*

## THE PC INTERFACE MODE



# SWITCHING MODE PROGRAMMABLE DC regulated power supply

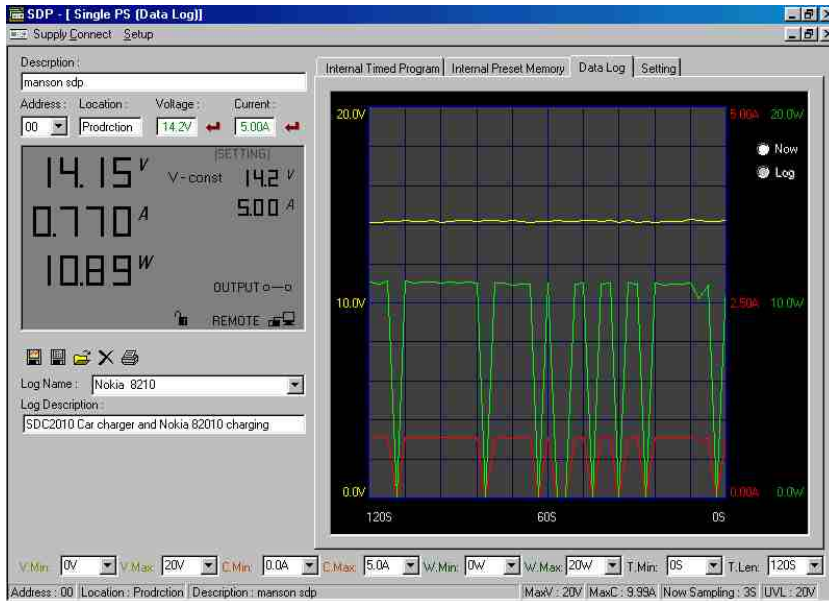
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## THE PC INTERFACE MODE

### *Typical Data Log display showing dynamic load*



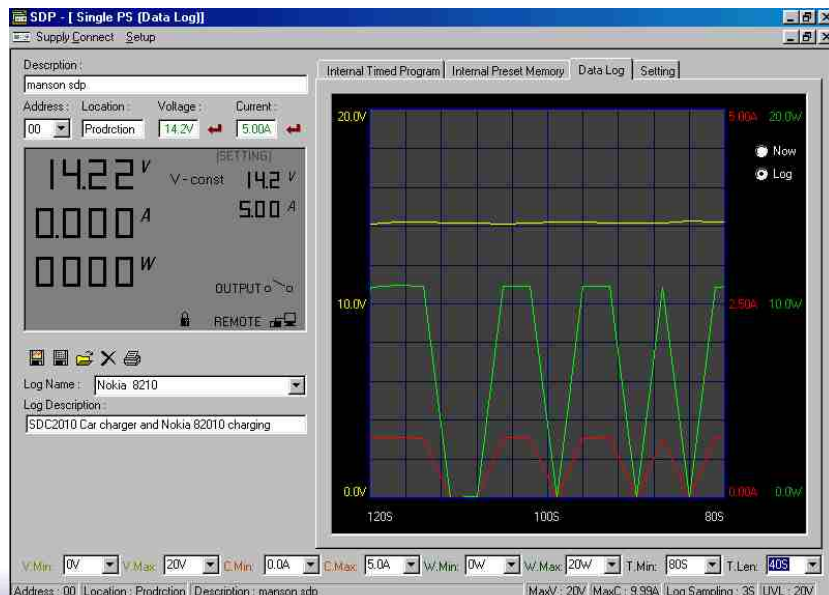
- Displays acquired results in graphs and cvs.
- Allows you to save and print results.
- Allows real-time logging directly to a PC with adjustable scanning rate.
- Allows you to transfer groups of data settings to the power supply.

Note the display of **dynamic load** due to fast scan rate which can be adjusted to 1 second.

All the parameter scales at the bottom such as V.Min. V.Max., C Min , C Max, W Min, T Min, T len (Time length ) can be adjusted so that informative analysis can be shown.

By changing the Time Min and the Time length you can better display your acquired data for any chosen time period for further analysis.

### *Display for Time Period from 80 second to 120 second for close analysis*



In the this example, we want to look closely at the power variation from 80 second to 120 second .So we set T Min. to 80 second and T Len to 40 second.

All the data is stored under the Log Name , "Nokia 8210" and can be retrieved for display in graph or printed or exported as CVS file.

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SDP - 2210 / 2405 / 2603

## Display of Time Program

The ease of inputting all the data of Timed Program into the PC and viewing all the entries in one single display window make the application of Time Program a plain sailing. All this is possible mainly due to our user friendly software and the **Bi-directional** capability of the unit.

The screenshot shows the 'SDP - [Single PS (Internal Timed Program)]' software window. On the left, there are real-time output readings: 13.88V, 0.000A, and 0.000W. The main area displays a table with 20 steps of the timed program. The table columns are Step, Voltage, Current, Minute, and Second. Below the table are buttons for Run, Read From SDP, Save To SDP, and Clear Table. The status bar at the bottom shows: Power Supply ID : 00 | Description : Test00 | MaxV : 20 | MaxC : 9.99 | Now Sampling : 3S | UVL : 20V

Step	Voltage	Current	Minute	Second
1	10.0	1.10	01	00
2	11.0	1.50	03	00
3	13.0	4.00	02	00
4	10.0	3.00	21	00
5	19.0	2.50	05	00
6	04.0	2.80	03	00
7	20.0	3.50	02	00
8	11.0	2.80	01	00
9	02.5	1.20	02	00
10	13.8	3.00	00	00
11	18.0	2.00	04	00
12	01.3	3.00	05	00
13	04.0	2.00	01	00
14	20.0	1.50	06	00
15	11.0	4.00	00	44
16	02.0	3.00	04	03
17	18.0	1.50	00	21
18	16.0	1.00	02	33
19	20.0	1.00	01	03
20	12.0	2.50	00	44

All the entry data can be saved in the PC, retrieved, and transferred to the Power Supply. You can have different groups of data stored in the PC thus no more keying in data at the power supply for different groups of repetitive applications.

It is really time-saving, and eliminating possible entry mistake at the power supply's front panel.