Scientech Scientech

Scientech 4078P Programmable DC Power Supply is a versatile instrument with facility to interface with PC. The front panel with keypad and cursor, makes it user friendly.

It can be set to use as a Constant Voltage and Constant Current source. With low ripple and excellent Line and Load regulation, Scientech 4078P is fully protected against over load, over voltage, over current, over heat and short circuit.

Features

- **DC 0-32 V; 0-3 Amp**

- **LCD screen for Voltage, Current & Power**

- **Current limit exceed indication (LED)**

- **Step increment for Voltage**

- **User's friendly settings of Voltage and Current using keypad and Encoder**

- **Constant Voltage source and Constant Current source**

- **PC Interface USB**

Technical Specifications

DC Output	:	0 - 32 V, 3 A
Current Limit	:	100 mA - 3 A
Setting Resolution	:	Voltage : 100 mV
		Current : 10 mA
Internal Resistance	:	$\leq$ 10 mΩ
Stability	:	2.5 mV at 30 V / 3 A
Recovery Time	:	$\leq$ 50 µs
Load Regulation	:	$\pm$ (0.05 % +10 mV) for 0 - 30 V
Line Regulation	:	$\pm$ (0.05 % +10 mV) for 0 - 30 V
Temperature Coefficient	:	$\pm$ (0.05 % + 5 mV / °C)
Ripple & Noise	:	$\leq$ 1 mVrms
Display	:	LCD Screen with backlit for voltage, current and Power
Accuracy	:	$\pm$(1% +1 digit)
Over Range Indication	:	Glowing 'Over Current' LED indicate Overload
Interface	:	USB
Protective modes	:	Over load, over voltage, over current, over heat and short circuit Protection.

General Information

Insulation

Between chassis & output terminals >10 MΩ at 100 V DC

Between chassis & AC plug >50 MΩ at 500 V DC

Power Supply : 230 V ±10%, 50 / 60 Hz

Operating Temperature : 0 - 40°C, 80% RH
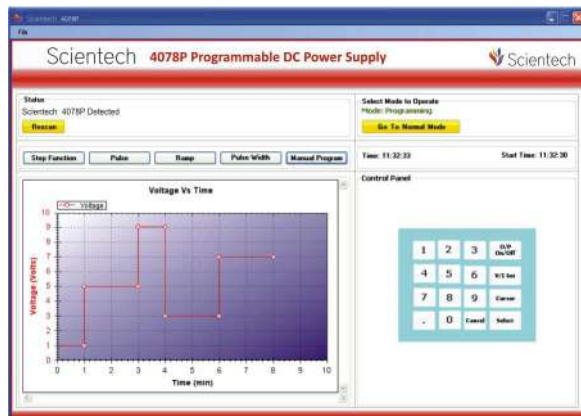
Dimension (mm) : W 198 × D 278 × H 90

Weight : 4 Kg approximately

Product Tutorial : Online on
www.ScientechLearning.com

Included Accessories : Mains cord, USB cable

Programming mode

The Programmable Power Supply can be operated through PC, parameters such as V-set, I-set, cursor and output on/off can be set.

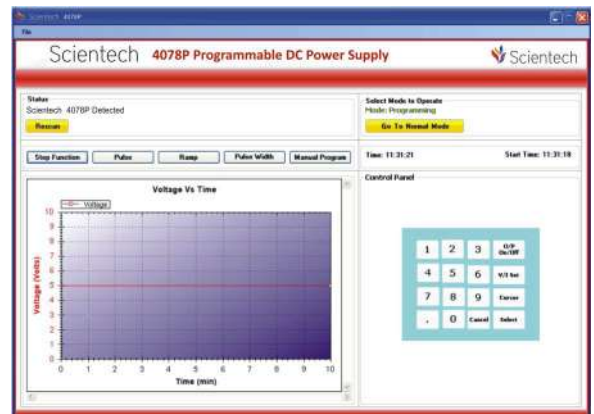

Scientech 4078P Programmable DC Power Supply

Software Window

In programming mode, you can set the output voltage linearly with respect to time in four different ways :

• Step mode

• Pulse mode

• RAMP mode

• Pulse width Mode

Different types of standard waveforms like RAMP, Pulse, Square, can be generated with voltage with respect to time defined by the users.
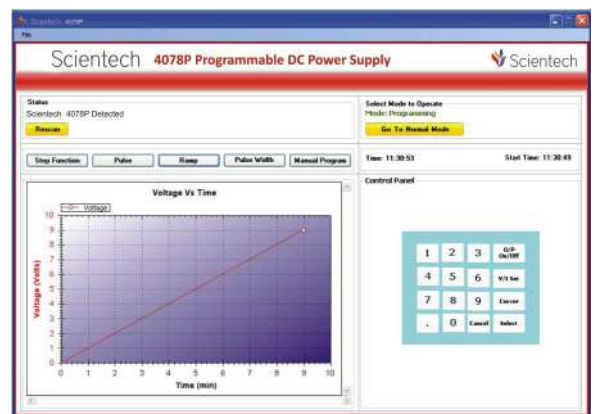

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Software Window

When Power Supply is operated in Manual Program. The data can be entered through software key pad and Arbitrary output can be generated.

The power supply can be programmed to perform set of predefined output voltage with respect to time. These voltages and time varying data can be fed through software, manually.

The test can be conducted and observed at the output terminals of the instrument

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Software Window

Subject to Change