

BENTHAM 610



OUTPUT



610
Constant Current Power Supply

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Whether calibrating a spectroradiometer or providing broadband input to a tunable light source or spectrophotometer, current setting accuracy and stability is crucial to minimise measurement uncertainty.

The 610 constant current (DC) power supply delivers superlative stability and reliable long-term performance across our range of incandescent and xenon illuminators and calibration standards.

Benefits:

- Easy and convenient manual or fully automated operation
- Worry-free operation thanks to calibrated current setting and excellent output stability
- Allows you to track lamp burn time

Key features:

- Constant current and software-based constant voltage mode for a wide range of applications
- User-friendly interface permits easy access to the full functionality of the 610 unit, controlled via the front panel or USB 2.0 interface
- Three operation modes, remote, local and variable
- Operates with all incandescent or Xenon lamps up to 250W
- Lamp power on/off switch provides current ramping
- Displays set current, actual current, lamp voltage, burn-time and lamp power
- 12V fan output

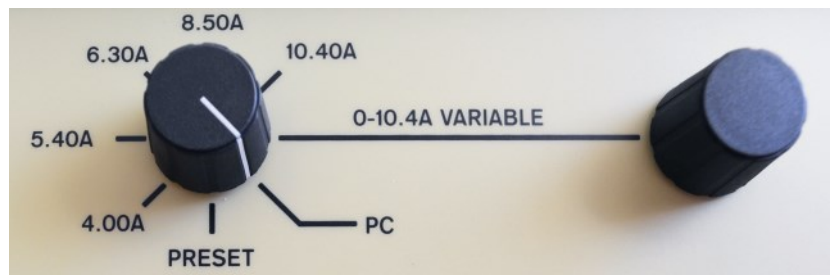


Operation modes

Bentham's 610 power supply delivers high-operational functionality via a local or PC interface.

Whilst operating in **Local mode**, current setting is either manually specified or simply selected from a range of pre-set values, ideal for a broad range of applications.

Alternatively, **PC mode** will offer users high accuracy current specification to within 1mA, implementing a SCPI protocol to permit remote access to the 610.



Display

The electro-luminescent display featured on the 610 power supply provides users with the following parameters throughout operation:

- Set Current
- Current
- Voltage
- Burn Time (lamp lifetime)
- Power — standard deviation is calculated on 10 samples



Specification

Input voltage	100V - 220V, 5A max, 50-60Hz
Output voltage & current	0-10.4A in remote use Max Voltage: 26V
Connection type	IEC mains input connection
Resolution	0.1A local; 0.001A over SCPI protocol
Operation modes	<p>Remote mode PC : SCPI protocol allows the Set Current to be assigned to an accuracy of 1mA</p> <p>Local mode Pre-set : Allows pre-set Current settings to be selected Variable : Used to set the current between 0-10.4A, indicated on the display</p>
Current pre-set	4.00 A, 5.40 A, 6.30 A, 8.50 A, 10.40 A, 0-10.4A Variable
Max Output power	250W
Setting control	Remote setting by user interface controlled through USB Local setting by knobs (fixed current or variable settings)
Operating conditions	Ambient temperature: 0 °C - +40 °C Storage temperature: -20 °C - +85 °C
Drift	0.05% of rated output <i>(Over an 8-hour interval with constant line, load and temperature, after a 30-minute warm-up period)</i>
Temperature stability	30ppm/°C
Compliance to standards	EN 61010-1:2010 EN 61326-1: 2013
Accuracy	±(0.04% +0.05A)
Output power ripple	<0.1%
Dimensions	45 x 30 x 13 cm
Weight	5 kg
Mode Types	Constant Current, Constant Voltage

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