



# LPS 400/850 Power Supplies

The HELIOS® LPS Power Supplies offer two high power dynamic options for lamp power in the HELIOS family. Precision 400W and 850W DC current and voltage programmable power supplies run all standard HELIOS internal and external lamps. HELIOS uses this power supply as the heart of the extreme current stability and performance in its QTH and Plasma sources. It is a modular, compact and rugged design in a 1U x 1/2" rack design weighing just over 11 lbs.

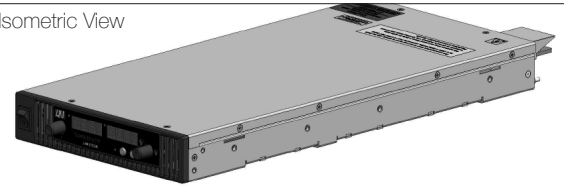
The HELIOSense software uses the full digital switching range, resolution and capability of the unit although there are also front panel controls and displays (lower resolution). The LPS-400 comes electrically pre-wired to safely drop into any HELIOS rack slot with an inclusive electrical bulkhead for easy installation at the modular knockouts in the HELIOS racks. In addition the LPS-400 comes standard with a 3 year performance warranty and has been thoroughly test for vibration and accelerated thermal conditions to ensure long term stable performance of HELIOS systems.

Front Panel



The LPS-400 unit is used with all HELIOS Lamp Assemblies in standard system configurations. The 40V/10.5A power profile will run all HIS and HES lamps below 200W and will also run the PEL-250 Plasma Lamp Assembly. Xenon lamps do not require the LPS-400 as they have an internal power unit.

Isometric View



The LPS-850 unit is a 150V/5.6A power profile designed to run the 200W, 300W and 600W HIS sources in HELIOS systems. It uses the same form factor as the LPS-400 and also comes pre-wired for easy installation and use.

Benchtop



**Benchtop Option:** Unit attached to the back of the standard LPS-400 or 850 that converts from terminal outputs to our standard HIS or HES cable adapter. Fan power inputs (from wall wort) and a selector switch that enable the fan power are included. Also includes wall power supply with radio jack for 30W/12V/2.5A power to the fan (Part#1035-2). The wall power supply is required for the HES lamps (integral fan) but not for the HIS lamps.

## LPS-400 Specifications

Part Number:	AS-03015-025 / AS-03030-030 Benchtop
Programmable Current Range:	0.003A to 10.500A
Front Panel Current Range:	0.01A to 10.5A
Line Regulated Current:	0.01% or Rated +2mA
Load Regulated Current:	0.02% or Rated +5mA
Programmable Voltage Range:	0.004 to 40 V
Front Panel Voltage Range:	0.01 to 40 V
Line Regulated Voltage:	0.005% or Rated +2mV
Load Regulated Voltage:	0.005% or Rated +2mV
Communication Interface:	USB 2.0, RS-232, RS-485
Internal EID:	Yes
Over Voltage/Current Protection:	Yes
Drift Over 8 hrs:	0.05% of rated power
Increase $\Delta V$ with Temp:	100 PPM/C from rated value
Rated AC Input/Frequency:	100-240 VAC, 47-63 Hz
Operating Temperature Range:	0 to 50 C
Storage Temperature Range:	-20 C to 70 C
Operating Temperature RH%:	30-90% (no condensation)
Storage Temperature RH%:	10-95% (no condensation)
Recommended Warm Up Time:	30 Minutes
Dimensions:	8.4 x 1.7 x 19.0 inch (2.14 x 43.6 x 483 mm)
Weight:	11 lbs (5 kg)
Cooling:	Forced Air Internal Fan
CoC / Test / Cal Report:	Included
Compliance:	CE, RoHS, EMC, UL, CSA, cCSAus
Calibration Certificates:	ANSI Z540 Available (Added Cost)
Standard Warranty:	3 years

## LPS-850 Specifications

Part Number:	AS-03015-026 / AS-03030-031 Benchtop
Programmable Current Range:	0.002A to 5.600A
Front Panel Current Range:	0.01A to 5.60A
Line Regulated Current:	0.01% or Rated +2mA
Load Regulated Current:	0.02% or Rated +5mA
Programmable Voltage Range:	0.01 to 150 V
Front Panel Voltage Range:	0.01 to 150 V
Line Regulated Voltage:	0.005% or Rated +2mV
Load Regulated Voltage:	0.005% or Rated +2mV
Communication Interface:	USB 2.0, RS-232, RS-485
Internal EID:	Yes
Over Voltage/Current Protection:	Yes
Drift Over 8 hrs:	0.05% of rated power
Increase $\Delta V$ with Temp:	100 PPM/C from rated value
Rated AC Input/Frequency:	100-240 VAC, 47-63 Hz
Operating Temperature Range:	0 to 50 C
Storage Temperature Range:	-20 C to 70 C
Operating Temperature RH%:	30-90% (no condensation)
Storage Temperature RH%:	10-95% (no condensation)
Recommended Warm Up Time:	30 Minutes
Dimensions:	8.4 x 1.7 x 19.0 inch (2.14 x 43.6 x 483 mm)
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Compliance:	CE, RoHS, EMC, UL, CSA, cCSAus
Calibration Certificates:	ANSI Z540 Available (Added Cost)
Standard Warranty:	3 years