

90-375 Watt, Benchtop Linear Power Supplies

The L Series is a family of linear DC power supplies designed for benchtop and portable applications. The family comprises fourteen models; outputs range from 0-8V to 0-300V at power levels from 90W to 375W. The supplies may be used as either voltage sources or current sources. Features such as isolated outputs, series/parallel operation, and tracking operation provide the flexibility for a variety of applications.



Features

- ◆ **Constant Voltage/Constant Current Operation**

The power supplies may be operated as either precisely regulated voltage sources or current sources. Crossover between modes is automatic, dependent only on load demand. Front panel LEDs indicate operating mode.

- ◆ **Series/Parallel Operation**

Multiple power supplies may be connected in series to extend the output voltage range. The LS and LT Series have the capability to operate outputs in parallel for increased current range.

- ◆ **3½ Digit LED**

LED displays are provided for each adjustable output. The LM and LH Series have two separate displays, one each for voltage and current. The LS and LT Series display is switch-selectable between voltage and current.

- ◆ **Universal AC Input**

The AC input is externally switch-selectable for 100V/120V/220V/240V at 50/60 Hz

- ◆ **CE Mark**

- ◆ **1 Year Warranty**



L Series

OUTPUT

Voltage and Current

Model	Voltage	Current
LH 8-30	0-8	0-30
LM 18-10	0-18	0-10
LS 18-5	0-18	0-5
LT 18-5	0-18	0-5
LH 18-20	0-18	0-20
LS 30-3	0-30	0-3
LT 30-3	0-30	0-3
LM 30-6	0-30	0-6
LH 35-10	0-35	0-10
LM 60-3	0-60	0-3
LH 60-6	0-60	0-6
LH 75-5	0-75	0-5
LH 110-3	0-110	0-3
LH 300-1	0-300	0-1

* LM, LS and LT series are CE marked.

Constant Voltage Mode

Ripple (Bandwidth 5 Hz to 1 MHz):
≤1.0 mV RMS

Line Regulation: ≤0.01% + 3 mV
(LT models used in series ≤0.01% + 5 mV)

Load Regulation: See table
(LT models in series operation ≤300 mV)

Transient Response: ≤100 μs for 50% load
change, 0.5A minimum load

Temperature Coefficient: ≤300 PPM/°C

Constant Current Mode

Ripple: ≤3 mA RMS; LH Series
≤ 5 mA RMS; LH 8-30 ≤ 10 mA RMS

Line Regulation: ≤0.2% + 3 mA

Load Regulation: ≤0.2% + 3 mA;
LH models ≤0.2% + 5 mA

INPUT

Voltage and Frequency:

100V/120V/220V/240V, ±10% (externally
switch-selectable), 50-60 Hz

GENERAL

Operating Temperature: 0°C to 40°C

Storage Temperature: -10°C to 70°C

Operating Humidity: <80% RH,
non condensing

Storage Humidity: <70% RH

Isolation Voltage: ±300 VDC or peak AC,
either output lead to chassis ground

Display Type: 3½ digit LED

Display Accuracy: ±0.5% of reading +
2 digits

Display Parameters: LM/LH models have
separate displays for voltage and current;
LS/LT models have a single display for
voltage and current (switch-selectable) on
each adjustable output; two display ranges
for current on LS models

Indicators: LH/LM/LS models: CV and CC
LEDs; LT models: CV, CC, parallel mode
and overload (5V output) LEDs

Output Termination: Front panel binding
posts, rated ≤10A; LH 8-30 and LH 18-20
provide an additional rear panel terminal
block

Regulatory Compliance: CE Mark (does
not include the LH Series)

Dimensions

LH: 5.7" (144 mm) H x 10" (254 mm) W x
16.5" (419 mm) D

LM: 5.7" (144 mm) H x 10" (254 mm) W x
13.2" (335 mm) D

LS: 5.7" (144 mm) H x 5" (127 mm) W x
11.2" (284 mm) D

LT: 5.7" (114 mm) H x 10" (254 mm) W x
13.2" (335 mm) D

Weight: See table

ACCESSORIES

One set of test leads for each output (except
LH 8-30 and LH 18-20), grounding strap for
each output, AC input line cord

LS SERIES

Analog Programming: Full scale remote
programming of output voltages and/or
current by a 0-10V control signal varies the
output proportionally from 0 to 100%

LT SERIES

5V, 3A Fixed Output

Voltage: 5V ± 0.25V

Current: 3A (foldback current limit)

Ripple: ≤2 mV RMS

Line Regulation: ≤5 mV

Load Regulation: ≤10 mV

Operating Mode-Adjustable Output

Independent: Two independent and isolated
outputs continuously adjustable, 0 to 100%
of rating

Series: Master/slave configuration with a
single or dual polarity output continuously
adjustable by the master control
LT 18-5: 0-36V, 0-5A; LT 30-3: 0-60V, 0-3A

Parallel: Master/slave configuration with a
single output continuously adjustable by the
master control LT 18-5: 0-18V, 0-10A;
LT 30-3: 0-30V, 0-6A

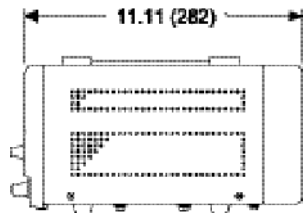
Slave Tracking Error: ≤0.5% + 10 mV of
the master output voltage

L Series

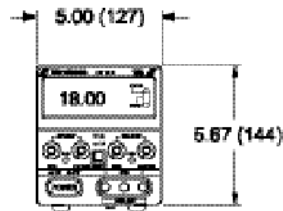
Model	Output Power		Voltage Load Regulation	Weight lb/kg
	Voltage VDC	Current ADC		
LH 8-30	0 to 8	0 to 30	< 0.02% + 5 mV	40.8/18.5
LM 18-10	0 to 18	0 to 10	< 0.01% + 5 mV	23.5/11.5
LS 18-5	0 to 18	0 to 5	< 0.01% + 5 mV	12.1/5.5
LT 18-5	0 to 18 (2 ea); 5	0 to 5 (2 ea); 3	< 0.02% + 5 mV	23.5/11.5
LH 18-20	0 to 18	0 to 20	< 0.02% + 5 mV	40.8/18.5
LS 30-3	0 to 30	0 to 3	< 0.01% + 3 mV	11.0/5.0
LT 30-3	0 to 30 (2 ea); 5	0 to 3 (2 ea); 3	< 0.01% + 5 mV	23.5/11.5
LM 30-6	0 to 30	0 to 6	< 0.01% + 5 mV	23.5/11.5
LH 35-10	0 to 35	0 to 10	< 0.01% + 5 mV	40.8/18.5
LM 60-3	0 to 60	0 to 3	< 0.01% + 5 mV	23.5/11.5
LH 60-6	0 to 60	0 to 6	< 0.01% + 5 mV	40.8/18.5
LH 75-5	0 to 75	0 to 5	< 0.01% + 5 mV	40.8/18.5
LH 110-3	0 to 110	0 to 3	< 0.01% + 5 mV	29.8/13.5
LH 300-1	0 to 300	0 to 1	< 0.01% + 5 mV	29.8/13.5

L Series

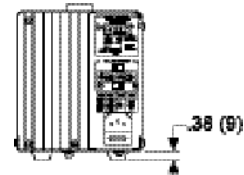
LS Series



Side View

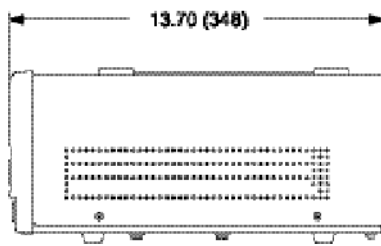


Front View

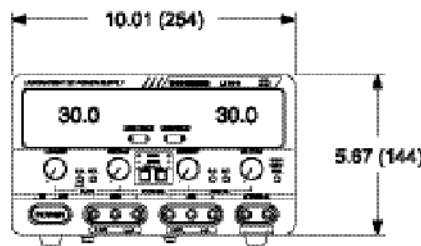


Rear View

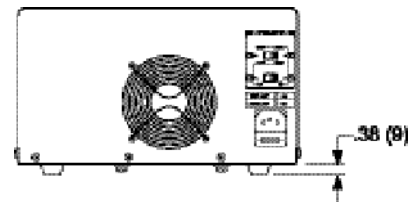
LT Series



Side View

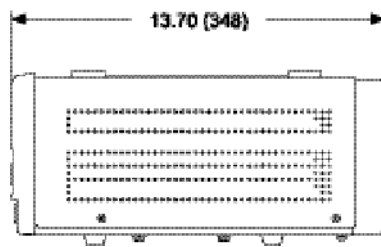


Front View

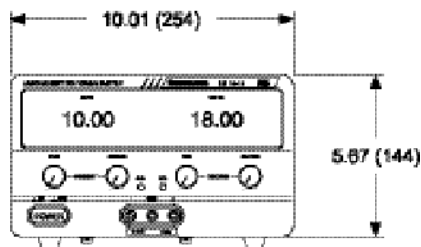


Rear View

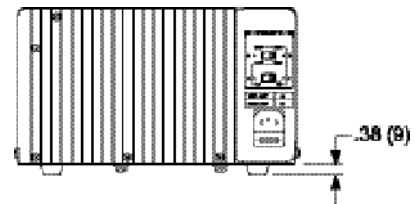
LM Series



Side View

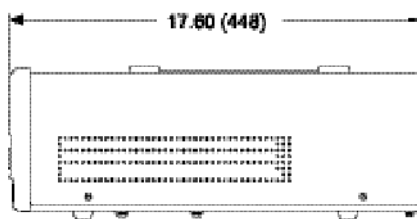


Front View

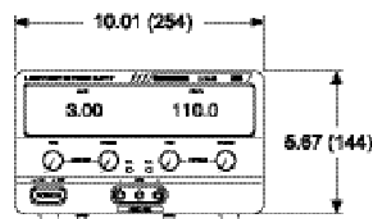


Rear View

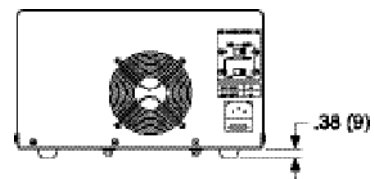
LH Series



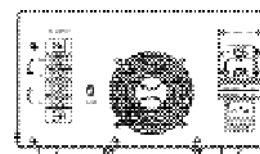
Side View



Front View



Rear View: 35V to 300V Models



Rear View: LH 8-30 & LH 18-20

Dimensions in inches (millimeters)