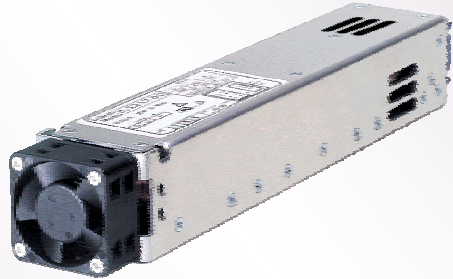


L SERIES

Redundant Hot Swap Power Supplies
7 Models • Single output, 200 Watts



DESCRIPTION

L Series is a line of 1 U, 1.58"H x 1.86"W x 11.00"L, 200 watt single output self-cooled power supplies. Uniquely packaged and highly compact, the L Series fit a wide range of industrial, telecom and computer networking applications. Units can be paralleled for additional power or used in combination with other models to meet multiple output requirements. When used in Deltron's RA20A racking system, up to 6 L Series units can be mounted in a 1U high rack space.

Designed to meet applicable NEBS standards, units feature a proven topology coupled with excellent thermal management to achieve outstanding performance and safety. DC Good feature provides logic signal for monitoring power supply status. Redundancy option with *FED* ultra low drop Or-ing circuit forms the basis of a parallel or hot pluggable N+1 system.

L SERIES RACK SYSTEM

The **RA20A** 1U high, 19"-wide racking system is available for paralleling or N+1 redundant systems. The 1.75"-high by 14.0"-deep rack accommodates up to six L Series power supplies providing up to 1200 watts. Racks include a top cover for added strength and protection.

Each power supply plugs into the backplane and is securely held in place by a removeable front panel. Individual output and signal connections are made via rear accessible screw terminals and pin connectors. Two 3 terminal Euro-block input connectors are provided, one for each half of the rack.

FEATURES

- 7 watts per cubic inch
- 80% typical efficiency
- 1U high - narrow profile
- Hot Pluggable
- Power Factor Corrected
- EN61000-3-2 compliant
- Universal input
- UL, CSA, TÜV (IEC, EN)
- FCC, CISPR Class B EMI
- IEC, EN Immunity
- **Standard features include:**
 - Integral ball bearing fan
 - DC Good Signal
 - Inhibit capability
 - OVP on all models
 - Overload and short circuit protection
 - Reverse voltage protection
- **Options and Accessories include:**
 - FED* redundant or-ing circuit with droop current share
 - Nylon slides
 - Isolated DC Good
 - 1U high racking system

MODELS

Output	Model
1.8V @ 35A	L1.8-35-YY
2.5V @ 35A	L2.5-35-YY
3.3V @ 35A	L3.3-35-YY
5V @ 35A	L5-35-YY
12V @ 17A	L12-17-YY
24V @ 9A	L24-9-YY
48V @ 4.2A	L48-4.2-YY

Other output ratings are available on special order.

OPTIONS

Option Code	Function
00	None
01	Redundancy
02	Nylon slides
04	Isolated DC Good

Replace the YY with the sum of the Option Codes.

USA: Deltron Inc.
290 Wissahickon Avenue, North Wales, PA 19454
Phone: 215.699.9261 Fax: 215.699.2310
Email: sales@deltroninc.com Website: www.deltroninc.com



MEXICO: Corporacion Delinc
Parque Industrial Maquillpark, Reynosa, Tamps 88500
Phone: 011.528.924.0506 Fax: 011.528.924.0386
Email: delinc@deltroninc.com



Delinc ISO 9002 registered., Deltron in process

L SERIES SPECIFICATIONS

INPUT

85-264 VAC, 47-63 Hz. Derate output power 10% for operation below 100 VAC.

POWER FACTOR

0.95 typical.

EMISSIONS

EN 55022/CISPR 22, Class B Conducted. EN 61000-3-2, Harmonics. EN 61000-3-3, Voltage Fluctuations design.

IMMUNITY

EN 61000-4-2, Level 3 Electrostatic Discharge. EN 61000-4-3 Level 3 Radiated Field. EN 61000-4-4, Level 3 Electrical Fast Transients. EN 61000-4-5, Level 3 Surge. EN 61000-4-6, Level 3 Conducted Field.

INPUT SURGE

230VAC - 50 amps max. 115VAC - 25 amps max.

EFFICIENCY

78-80% typical.

HOLDUP TIME

20 milliseconds from loss of AC power.

OUTPUTS

See model selection table. Outputs are trim adjustable $\pm 5\%$.

OUTPUT POLARITY

Output is floating from chassis and can be referenced to ground as required.

LINE REGULATION

Less than $\pm 0.5\%$ for input changes from nominal to min. or max. rated values.

LOAD REGULATION

$\pm 0.5\%$ or $\pm 10\text{mV}$ for load changes from 50% to 0% or 100% of max. When redundancy option 01 is specified, load regulation is 3%, which includes lossless, programmed current share droop.

MINIMUM LOAD

None required.

RIPPLE & NOISE

1% or 50mV, pk.-pk. whichever is greater, 20 MHz bandwidth. All models.

OPERATING TEMPERATURE

0-70°C. Derate 2.5%/°C above 50°C.

COOLING

Forced air cooling with built in fan.

TEMPERATURE COEFFICIENT

$\pm 0.02\%/^{\circ}\text{C}$ typical.

RECOVERY TIME

500 microseconds typical for a step load change from 50% to 25% or 75%.

SAFETY

Units meet UL 1950/60 950, CSA 22.2 No. 950, EN 60 950.

ISOLATION

Conforms to safety agency standards.

INPUT UNDERVOLTAGE

Protects against damage for undervoltage operation.

SOFT START

Units have soft start feature to protect critical components.

OVERVOLTAGE PROTECTION

Standard on all models.

REVERSE VOLTAGE PROTECTION

Standard on output.

OVERLOAD & SHORT CIRCUIT

Output protected by duty cycle current foldback circuit with automatic recovery when overload is removed.

THERMAL SHUTDOWN

Circuit cuts off supply in case of local over temperature. Units reset automatically when temperature returns to normal.

DC GOOD

Standard circuit provides TTL compatible open collector Output Fail signal referenced to the common pin when the output drops by 10% or more.

INHIBIT

TTL compatible system inhibit provided.

ENABLE

Enable pin must be shorted to Common for proper operation.

REMOTE SENSING

Standard on output.

SHOCK & VIBRATION

Shock per MIL-STD 810-E Method 516.4, Procedure I. Vibration per MIL-STD 810-E Method 514.4, Category 1, Procedure I.

MECHANICAL

Chassis dimensions are 1.58" H x 1.86" W x 11.00" L.

CONNECTIONS

Connections via Positronic connector.

WARRANTY

Deltron's standard 2 year warranty applies.

OPTIONS:

REDUNDANCY

Redundant operation with *FED* ultra low drop or-ing circuit and wireless droop current sharing for use as a hot pluggable N+1 redundant system.

NYLON SLIDES

Power supply chassis mounted slides provide ease of pluggability for use with Deltron model RA20A or equivalent racking system.

ISOLATED DC GOOD

Optional circuit provides normally open isolated solid state contacts when the power supply is in the output good condition. Otherwise, it presents a normally closed contact. Isolation voltage: 1500 V rms; contact voltage: 400 volts, 150 mA.

Specifications subject to change without notice.

