POWER

LPS170 Series
175 Watts

Data Sheet

Total Power:	**100 - 175 Watts**
Input Voltage:	**85 - 264 Vac**
	120 - 300 Vdc
# of Outputs:	**Single**

SPECIAL FEATURES

- Active power factor correction
- IEC EN61000-3-2 compliance
- Wide range adjustable output: Remote sense on main output
- Single wire current sharing
- Power fail and remote inhibit
- Built-in EMI filter
- Low output ripple
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- 5 V standby output
- 12 V Aux output
- Optional cover (-C suffix)
- RoHS compliant

SAFETY

- VDE   0805/EN60950 (IEC950)
- UL   UL1950
- CB   Certificate and report
- CSA   CSA 22.2-234 Level 3
- CE   Mark (LVD)
- NEMKO   EN 60950/EMKO-TUE

Electrical Specifications

Input	
Input range	85 - 264 Vac; 120-300 Vdc
Frequency	47 - 63 Hz
Inrush current	38 A max, cold start @ 25°C
Efficiency	75% typical at full load
EMI filter	FCC Class B conducted CISPR 22 Class B conducted EN55022 Class B conducted VDE 0878 PT3 Class B conducted
Power Factor	0.99 typical
Safety ground leakage current	1.0 mA @ 50/60 Hz, 264 Vac input
Output	
Maximum power	110 W convection (75 W with cover) 175 W with 30 CFM forced air (130 W with cover)
Adjustment range	2:1 wide ratio minimum
Standby outputs	5 V @ 2 A regulated ±5%
Hold-up time	20 ms @175 W load at nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	10% to 40% above nominal output
Aux output	12 V @ 1 A -5 %, +10%

ARTESYN™
An Advanced Energy Company

Logic Control

Power failure	TTL logic signal goes high 100 - 500 msec after V1 output; It goes low at least 4 msec before loss of regulation
Remote inhibit	Requires contact closure to inhibit outputs
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.
DC - OK	TTL logic signal goes high after main output is in regulation. It goes low when there is a loss of regulation

Environmental Specifications

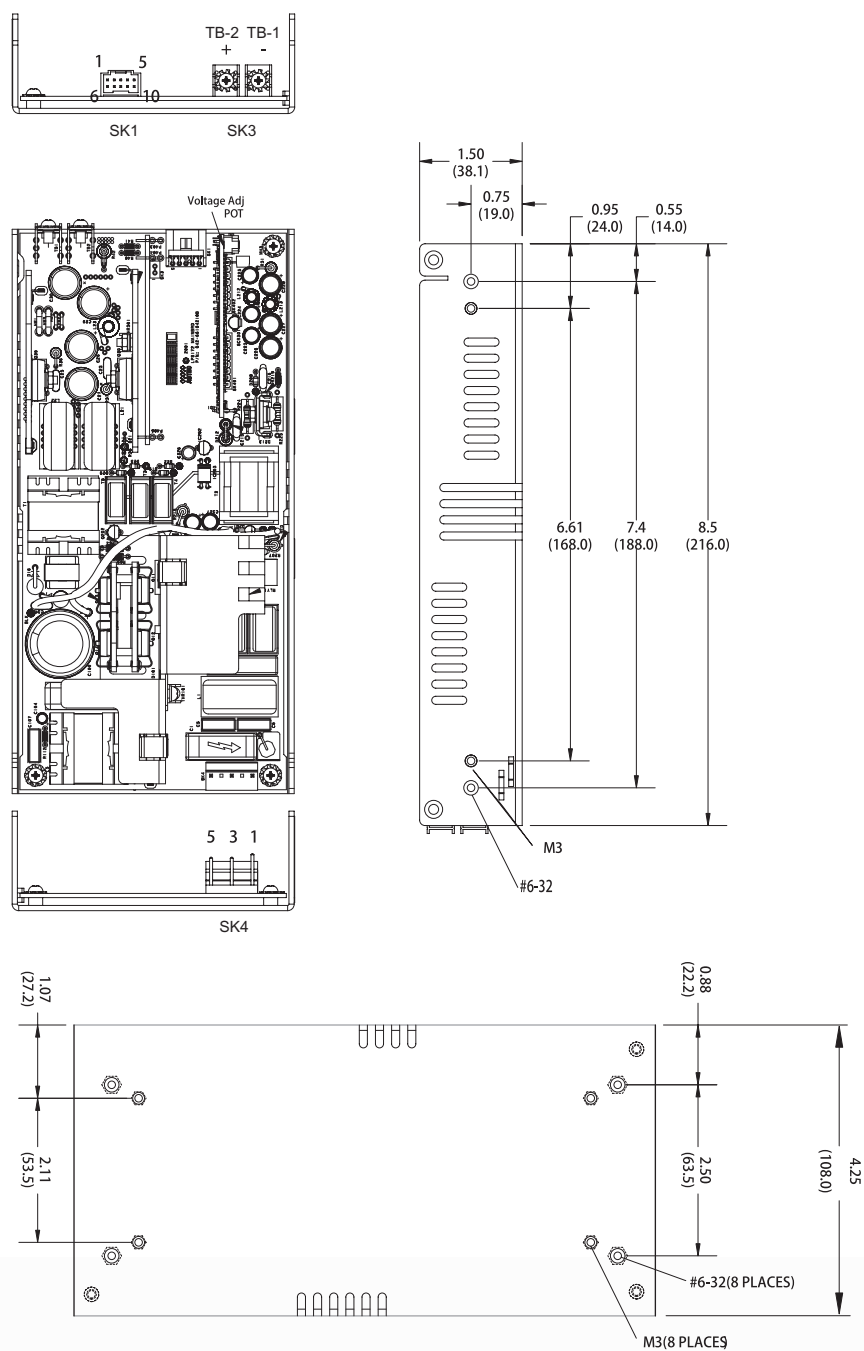|	
Operating temperature	0° to 50 °C ambient; derate each output at 2.5% per degree from 50° to 70 °C
Low temperature start	-20 °C
Temperature coefficient	±0.4% per °C
Storage temperature	-40° to 85 °C
Electromagnetic susceptibility	Designed to meet IEC EN61000-4, -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity	Operating; non-condensing 5% to 95%
Vibration	Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75G peak 5Hz to 500Hz, operational
MTBF demonstrated	>550,000 hours at full load and 25 °C ambient conditions

Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P(PARD)[3]
LPS172	5 V (2.5 - 6 V)	0 A	22 A	35 A	38 A	±2%	50 mV
LPS173	12 V (6 - 12 V)	0 A	9.1 A	15 A	16.5 A	±2%	120 mV
LPS174	15 V (12 - 24 V)	0 A	7.3 A	12 A	13.2 A	±2%	<1%
LPS175	24 V (24 - 54 V)	0 A	4.5 A	7.5 A	8.2 A	±2%	<1%

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.

2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.

3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

4. Remote inhibit resets OVP latch.

5. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

Note: -C suffix added to the model number indicates cover option.

Mechanical Drawing

Pin Assignments

Connector	LPS17x	
SK1	PIN 1	+12 V
	PIN 2	5 V Standby
	PIN 3	Common
	PIN 4	V1 SWP
	PIN 5	Common
	PIN 6	+V1 sense
	PIN 7	Sense common
	PIN 8	Remote inhibit
	PIN 9	DC power good
	PIN 10	POK
SK3	TB-1	COMMON
	TB-2	Main output
SK4	PIN 1	GROUND
	PIN 3	LINE
	Pin 5	NEUTRAL

Mating Connectors

AC Input (SK4)	Molex 09-50-8051 (USA) Molex 09-91-0500 (UK) PINS: 08-58-0111
DC Outputs (SK3)	Molex 19141-0058
Control Signals (SK1)	Molex 90142-0010 (USA) PINS: 90119-2110 or Amp: 87977-3 PINS: 87309-8
Artesyn Embedded Power Connector Kit #70-841-016, includes all of the above	

1. Specifications subject to change without notice.

2. All dimensions in inches (mm), tolerance is ±0.02" (±0.5 mm)

3. Mounting holes M1 and M2 should be grounded for EMI purposes.

4. Mounting hole M1 is safety ground connection.

5. Specifications are for convection rating at factory settings at 115 Vac input, 25 °C unless otherwise stated.

6. Warranty: 2 years

7. Weight: 1.8 lbs/0.85 kg

ARTESYN
An Advanced Energy Company

www.artesyn.com

For more information: **www.artesyn.com**
For support: **productsupport.ep@artesyn.com**

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Artesyn Embedded Technologies](#):
LPS172 LPS172-C LPS173-C LPS174 LPS174-C LPS175 LPS175-C LPS174-M-C LPS174-M LPS173-M-C LPS173-M