## **300 Watt Industrial**



## Features

- 3 x 5 x 1.5 inches
- Wide range AC input
- EMI class B
- CE marked to LVD
- Class 1 & class 2 options

	Electrical Specification	ations		
Input Voltage	90-264 VAC/120-390 VDC, Unive	rsal		
Input Frequency	47-63 Hz			
Input Current	120 VAC: 3.2 A max.	230 VAC: 1.65 A max.		
Inrush Current	120 VAC: 35 A max.	230 VAC: 65 A max.		
Leakage Current	120 VAC: < 150 μA	230 VAC: < 300 μA		
Efficiency	120 VAC: 88% typical	230 VAC: 92% typical		
Hold-up Time	120 VAC: 10 ms	230 VAC: 10 ms		
Power Factor	120 VAC: 0.98	230 VAC: 0.95		
Output Power	200 to 325 W			
Line Regulation	+/-0.5%			
Load Regulation	+/-2%			
Transient Response	< 10%, 50% to 100% load change	< 10%, 50% to 100% load change, 50 Hz, 50% duty cycle, 0.1 A/μs,		
	recovery time < 5 ms			
Rise Time	< 100 ms	< 100 ms		
Set Point Tolerance	+/-1%			
Output Adjustability	+/-3%			
Over Current Protection	110 to 150%			
Over Voltage Protection	110 to 150%, auto recovery			
Short Circuit Protection	Short term, auto recovery			
Over Temperature Protection	110°C primary heat sink, auto recovery			
Switching Frequency	PFC converter: Fixed, 80 kHz typical			
	Resonant converter: Variable, 35-	250 kHz; 90 kHz typical		
Operating Temperature	-20 to +70°C, refer derating curve; -20 to 0°C, start-up is guaranteed			
Storage Temperature	-40 to +70°C			
Relative Humidity	95% Rh, non condensing			
Altitude	Operating: 10,000 ft.; Non-operating: 40,000 ft.			
MTBF	> 250 kh; Bellcore TR332			
Isolation Voltage	Min. 4242 VDC between input to	Min. 4242 VDC between input to output		
Cooling	Convection: 140 W; 300 LFM: 200			
	Convection: 180 W; 300 LFM: 300	W (12 V & 15 V model)		
	Convection: 180 W; 300 LFM: 325	W (24 V, 30 V & 48 V model)		

Model Number	Voltage	Max. Load	Max. Load	Min. Load	Ripple <sup>2</sup>
		(Convection)	(300 LFM)		
LFWLT300-1000	5 V	28.0 A	40.0 A	0.0 A	2%
LFWLT300-1001	12 V	15.0 A	25.0 A	0.0 A	2%
LFWLT300-1002	15 V	12.0 A	20.0 A	0.0 A	2%
LFWLT300-1003	24 V	7.5 A	13.54 A	0.0 A	2%
LFWLT300-1004	48 V	3.75 A	6.77 A	0.0 A	2%
LFWLT300-1005	30 V	6.0 A	10.83 A	0.0 A	2%
LFWLT300-CK metal	cover kit accesso	ory			

Connectors					
J1	Pin 1	AC LINE			
	Pin 2	AC NEUTRAL			
Spade Connector (J4)		EARTH			
(Class 1 product only)					
J2	Pin 1	RTN			
	Pin 2	V1			
J3	Pin 1	REMOTE ON/OFF			
	Pin 2	RTN			
	Pin 3	VFAN (+12 V/0.5 A)			
	Pin 4	-VE REMOTE SENSE			
	Pin 5	VSTBY (+5 V/2 A, +/-5%)			
	Pin 6	+VE REMOTE SENSE			
	Pin 7	RTN			
<u> </u>	Pin 8	POWER GOOD			

## Notes

- 1. Peak current rating on main output is 120% of max., lasting < 30 s with a maximum 10% duty cycle.
- 2. Ripple is peak to peak with 20 MHz bandwidth and 10 μF (Tantalum capacitor) in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.
- 3. Class 2 means without input Earth pin. Add -2 suffix to order class 2 product.
- 4. Combined output power of main output, fan supply and standby supply shall not exceed max. power rating.
- 5. Standby output voltage tolerance including set point accuracy, line and load regulation is +/-10%. Ripple and noise is less than 5%.
- 6. Fan supply output voltage tolerance including set point accuracy, line and load regulation is +/-30% and needs min. 1% load on main output to be within regulation band. Ripple and noise is less than 10%.
- 7. Class 2 product meets class A limit line for conducted emission.
- 8. Specifications are for nominal input voltage, 25°C unless otherwise stated.
- 9. PSU is supplied with J3 housing, pin-1 and pin-2 shorted to enable main output without remote on-off feature.
- 10. Derate output power linearly to 80% from 90 VAC to 80 VAC input.



Mechanical Specifications				
AC Input Connector (J1)	Molex: 26-60-4030 Mating: 09-50-3031; Pins: 08-50-0106			
EARTH (J4)	Molex: 19705-4301			
	Mating: 190030001			
DC Output Connector (J2)	6-32 inches Screw Pan HD			
	Mating: 16 AWG wire crimped to Ring Tongue Terminal AMP: 8-31886-1			
Signal Connector (J3)	Molex: 22-23-2081			
	Mating: 22-01-2087; Pins: 08-50-0113			
Dimensions	3 x 5 x 1.5 inches			
	(76.2 x 127 x 38 mm)			
Weight	450 g			
	EMC			
CE Mark	Complies with LVD Directive			
Conducted Emissions	EN55022-B, CISPR22-B, FCC PART15-B			
Static Discharge	EN61000-4-2, Level-3			
RF Field Susceptibility	EN61000-4-3, Level-3			
Fast Transients/Bursts	EN61000-4-4, Level-3			
Radiated Emissions	EN55022-B, CISPR22-B, FCC PART15-B			
	To be controlled in end system			
Surge Susceptibility	EN61000-4-5, Level-3			
Harmonic Current	EN61000-3-2, Class D			
	Safety			
Safety Standard(s)	EN60950-1, IEC60950-1 (ed. 2), UL 60950 (ed.2), CSA C22.2			
Approval Agency	Nemko, Nemko-CCL, INC.			
Safety File Number(s)	Nemko: P12215320/60, NA 201210176			
Signal				
Power Good Signal	TTL signal goes high after main output is within regulation band, delay is 0.1 to 0.3 s			
Remote Sense	Compensates for 200 mV drop			
Remote on/off	To turn-on PSU short remote pin to ground			





