

AC/DC External Desktop

80 Watts HUP80 Series



THE XPERTS IN POWER

- Meets EN61000-3-2
- Built-in EMI Filter
- 100% Burn-in
- Input Surge Current Protection
- CE Mark
- Approved to UL, CSA and TUV Safety Standards
- Wide Input Voltage 90-264 VAC

Specification

Input

- Input Voltage • 90-264 VAC
- Input Frequency • 47 to 63 Hz
- Input Current • 1.9A maximum
- Inrush Current • 15A max. at 115 VAC or 30A max. at 230 VAC cold start
- Safety Ground Leakage Current • 0.75 mA max at 240 VAC
- Input Protection • Internal 2 A fuse

Output

- Output Voltage: • See Tables
- Output Current • See Tables
- Output Power Range • 0 to 80 Watts
- Output Adjustment • $\pm 5\%$, not user adjustable
- Start Up Delay • 2 S max
- Start Up Rise Time • 2 mS
- Hold-up time • 12 msec minimum
- Initial Set Accuracy • $\pm 3\%$
- Drift • $\pm 1\%$ mV
- Line Regulation • $\pm 1\%$ maximum at full load
- Load Regulation • $\pm 5\%$
- Overshoot/Undershoot • 150% at turn on/off
- Transient Response • Maximum excursion of 4% or better on all models. Recovers to 1% of final value within 500 μ s after a 25% step load change
- Ripple and Noise • 1% peak to peak max.
- Overvoltage Protection • Provided on output #1 only set at 112-132% of its nominal voltage
- Overload Protection • All outputs protected to short circuit conditions
- Short Circuit Protection • Hiccup mode

- Temperature Coefficient • All outputs $\pm 0.04\%/^{\circ}\text{C}$ maximum

General

- Efficiency • 83% typical
- Isolation Voltage • 3000 VAC from input to output 1500 VAC from input to ground 500 VAC output to ground
- LED Indications • Green LED for AC OK & DC OK
- MTBF • 100,000 hours minimum at full load at 25 $^{\circ}\text{C}$ ambient
- Dimensions • 3.09" x 6.61" x 1.75"
- Weight • 750 g approx

Environmental

- Operating Temperature Range • 0 $^{\circ}\text{C}$ to +70 $^{\circ}\text{C}$, derate linearly from 100% load at +40 $^{\circ}\text{C}$ to 50% load at +70 $^{\circ}\text{C}$
- Cooling • Convection cooled
- Operating Humidity • 5-95% RH, non condensing
- Storage Temperature • -40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$
- Storage Humidity • 5-95% RH, non condensing

EMC & Safety

- Emissions • EN61000-3-2, -3 EN55022/CISPR22 Class B & FCC Part 15 Level B conducted & radiated
- ESD Susceptibility • EN61000-4-2, Level 3, Perf Criteria A
- Radiated Susceptibility • EN61000-4-3, Level 2, Perf Criteria A
- EFT/Burst • EN61000-4-4, Level 2, Perf Criteria A
- Surge • EN61000-4-5, Level 3, Perf Criteria A
- Conducted Susceptibility • EN61000-4-6 Level 2 Perf Criteria A
- Safety Approvals • EN60950, UL60950, CSA950

OUTPUT VOLTAGE & CURRENT RATINGS

HUP80

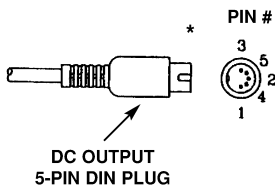
Max Output Power	Output #1				Output #2				Output #3				Model Number
	Vnom	Imin	I _{max}	Tol. ⁽¹⁾	Vnom	Imin	I _{max}	Tol. ⁽¹⁾	Vnom	Imin	I _{max}	Tol. ⁽¹⁾	
50 W	3.3 V	0.0 A	15.1 A	7%									HUP80-00
65 W	5.0 V	0.0 A	13.0 A	5%									HUP80-10
70 W	7.0 V	0.0 A	9.9 A	5%									HUP80-10-1
75 W	10.0 V	0.0 A	7.5 A	5%									HUP80-11
80 W	12.0 V	0.0 A	6.6 A	5%									HUP80-12
80 W	15.0 V	0.0 A	5.3 A	5%									HUP80-13
80 W	18.0 V	0.0 A	4.4 A	5%									HUP80-13-1
80 W	24.0 V	0.0 A	3.3 A	5%									HUP80-14
80 W	30.0 V	0.0 A	2.7 A	5%									HUP80-16
80 W	36.0 V	0.0 A	2.2 A	3%									HUP80-17
80 W	48.0 V	0.0 A	1.7 A	3%									HUP80-18
60 W	+5.0 V	0.5 A	7.0 A	5%	+12 V	0.3 A	3.0 A	5%					HUP80-23
60 W	+5.0 V	0.5 A	7.0 A	5%	+15 V	0.3 A	3.0 A	5%					HUP80-24
60 W	+5.0 V	0.5 A	7.0 A	5%	+24 V	0.2 A	2.0 A	5%					HUP80-25
60 W	+5.0 V	0.5 A	7.0 A	5%	-24 V	0.2 A	2.0 A	5%					HUP80-25-1
38 W	+3.3 V	0.5 A	7.0 A	5%	+5 V	0.3 A	3.0 A	5%					HUP80-26
56 W	+3.3 V	0.5 A	7.0 A	5%	+12 V	0.2 A	2.7 A	5%					HUP80-27
65 W	+5.0 V	0.5 A	6.0 A	5%	+12 V	0.2 A	2.7 A	5%	-5 V	0.1 A	0.3 A	5%	HUP80-30
59 W	+5.0 V	0.5 A	6.0 A	5%	+12 V	0.2 A	2.1 A	5%	-12 V	0.1 A	0.3 A	5%	HUP80-31
65 W	+5.0 V	0.5 A	6.0 A	5%	+15 V	0.2 A	2.1 A	5%	-15 V	0.1 A	0.2 A	5%	HUP80-32
63 W	+3.3 V	0.5 A	7.0 A	5%	+12 V	0.3 A	3.0 A	5%	-5 V	0.1 A	0.8 A	5%	HUP80-36-1
65 W	+3.3 V	0.5 A	7.0 A	5%	+12 V	0.3 A	3.0 A	5%	-12 V	0.1 A	0.8 A	5%	HUP80-36-3
65 W	+5.0 V	0.5 A	6.0 A	5%	+24 V	0.1 A	1.2 A	5%	-12 V	0.1 A	0.4 A	5%	HUP80-39
65 W	+5.0 V	0.5 A	7.0 A	5%	+24 V	0.2 A	2.0 A	5%	-24 V	0.1 A	0.5 A	5%	HUP80-39-1

Notes

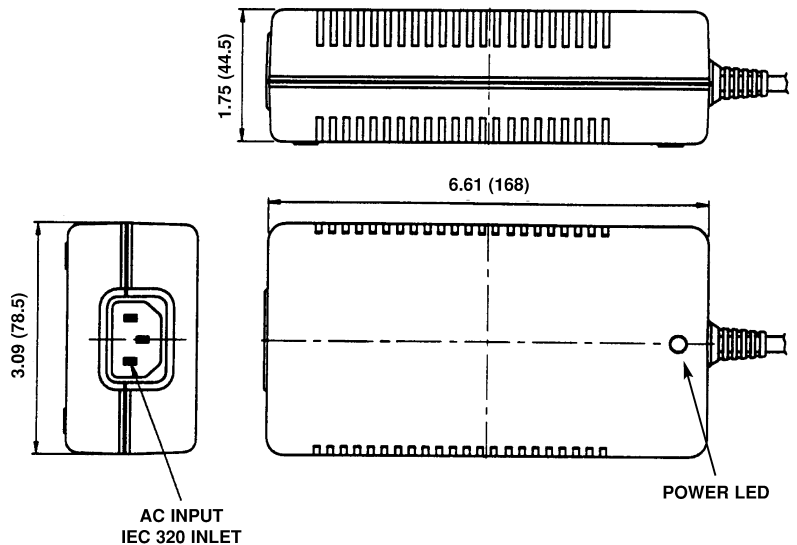
1. Total regulation includes tolerance, line regulation and load regulation.
2. For optional On/Off switch, add suffix 'S' to model number.

Mechanical Details

PIN CONNECTIONS 5-Pin is Standard			
Pin	Single	Dual	Triple
1	Common	Common	Common
2	Common	Common	Common
3	Output	Output #1	Output #1
4	Common	Common	Output #3
5	Output	Output #2	Output #2



For HUP80-00 and HUP80-10 only:
Output connector is an 8-pin DIN connector.
Pin 3, 5, 7 and 8 are +Vout. Pins 1, 2, 4 and 6 are Common.



NOTES:

1. Dimensions shown in inches (mm).
2. Tolerance 0.04" (1.0mm) maximum.
3. Cable length is 48.0" approx.
4. Optional output connectors available consult factory.
5. Weight: 750 g approx.
6. Multiple output models include a ferrite bead on the output cable.