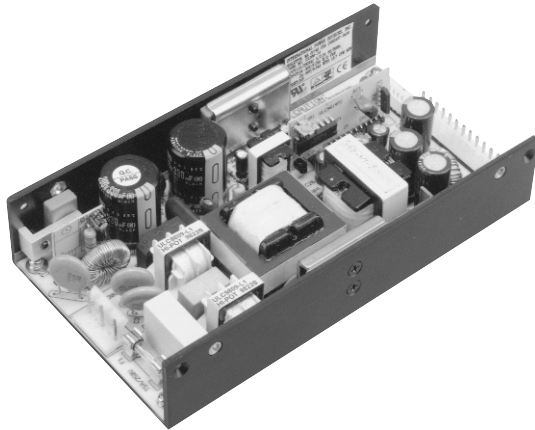


AC/DC U-Channel

300 Watts HUL300 Series

XPiQ inc.

Intelligent Design Quality Product



Meets EN61000-3-2, -3

•
Remote On/Off

•
Thermal Shutdown

•
Short Circuit Protection
With Auto Recovery

•
Power Good/LED on Power Supply

•
International Safety Approvals with
CE Mark (LVD)

Specification

Input

- Input Voltage** • 90-132 VAC, 180 to 264 VAC (auto-ranging)
- Input Frequency** • 47-63 Hz
- Input Current** • 6.3 A at 115 VAC
3.15A at 230 VAC
- Leakage Current** • 3.5mA at 230 VAC

Output

- Output Voltage** • See Tables
- Output Current** • See Tables
- Hold Up Time** • 20 msec min at 125 VAC/80% load
- Ripple & Noise** • 1% p-p or 100mV max
- Oversvoltage Protection** • Set at 110-135% of maximum output voltage (on output #1 only)
- Overcurrent Protection:** • All outputs protected to short circuit conditions
- Temperature coefficient:** • $\pm 0.1\%/^{\circ}\text{C}$ maximum
- Transient Response** • Maximum excursion of 5% recovering to 1% of final value in less than 500 μs after a 50% step load change
- Overtemperature Protection** • Standard
- Fan Output** • 12 V/160 mA

General

- Efficiency** • 70% min. at 230 VAC
- Line Regulation** • $\pm 1\%$ maximum at full load
- Inrush Current** • 35A at 115 VAC or
70A at 230 VAC at 25°C cold start
- Withstand Voltage** • 3000 VAC from input to output
1500 VAC from input to ground
- Switching Frequency** • 30kHz
- Hold Up Time** • 20ms min at 125 VAC/80% load

Environmental

- Operating Temperature** • 0°C to +60°C*
- Storage Temperature** • -20°C to +85°C
- Relative Humidity** • 5% to 90% non condensing
- MTBF** • 100,000 hrs (MIL-HDBK-217D)

Safety and EMC

- Safety Approvals** • UL1950, CSA C22.2 No. 234
IEC 950 (EN60950)
- EMI** • In compliance with CISPR22
(EN55022), Class A and
FCC Class B

* Derate linearly from 100% load at 40°C to 50% load at 60°C

OUTPUT VOLTAGE & CURRENT RATINGS

HUL300

Output #1				Output #2				Output #3				Output #4				Model Number
Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
5.0 V	0.5 A	60.0 A	2%													HUL300-10
3.3 V	0.5 A	60.0 A	2%													HUL300-10-1
12.0 V	0.5 A	25.0 A	2%													HUL300-12
15.0 V	0.5 A	20.0 A	2%													HUL300-13
24.0 V	0.5 A	12.5 A	2%													HUL300-14
48.0 V	0.5 A	6.25 A	2%													HUL300-18
+5.0 V	0.5 A	30.0 A	5%	+12 V	0 A	12.5 A	5%									HUL300-23
+5.0 V	0.5 A	30.0 A	5%	+15 V	0 A	10.0 A	5%									HUL300-24
+5.0 V	0.5 A	30.0 A	5%	+24 V	0 A	6.3 A	5%									HUL300-25
+5.0 V	0.5 A	30.0 A	5%	+12 V	0 A	10.5 A	5%					F 12 V	0 A	2 A	5%	HUL300-31
+5.0 V	0.5 A	30.0 A	5%	+15 V	0 A	8.0 A	5%					F 15 V	0 A	2 A	5%	HUL300-32
+5.0 V	0.5 A	30.0 A	5%	+12 V	0 A	10.0 A	5%	-5 V	0 A	2 A	5%	F 12 V	0 A	2 A	5%	HUL300-40
+5.0 V	0.5 A	30.0 A	5%	+24 V	0 A	4.3 A	5%	-12 V	0 A	2 A	5%	F 12 V	0 A	2 A	5%	HUL300-45
+5.0 V	0.5 A	30.0 A	5%	+15 V	0 A	7.4 A	5%	-5 V	0 A	2 A	5%	F 15 V	0 A	2 A	5%	HUL300-46

Notes

1. Use part number UL300-XX for product without harmonic correction. Example: UL300-10.
2. Output #4 is floating. It can be connected externally for positive or negative output.
3. Total output power for HUL300-12,13,14,18 is 200W convection cooled, 300W with 30cfm forced air cooling.
4. Total output power for all other HUL300 models is 150W convection cooled, 300W with 30cfm forced air cooling.

Pin Chart

Output Connector P2

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Single O/P Models	Output #1	Output #1	Output #1	Output #1	Output #1	Output #1	Output #1	Return	Return	Return	Return	Return	Return	Return
Multi O/P Models	Output #3	Output #1	Output #1	Output #1	Output #1	Common Return	Common Return	Common Return	Common Return	Common Return	Output #2	Output #2	Output #4	Output #4 Return

Mechanical Details

P3 Single Outputs		Multiple Outputs	
Pin 1	FAN+	Return	Return
Pin 2	Return	DC OK	Return
Pin 3	DC OK	Return	Return
Pin 4	Power Good	Remote ON/OFF	Return
Pin 5	Remote ON/OFF	Return	Return
Pin 6	Return	Power Good	Return

NOTES:

1. Dimensions shown in mm (inches)
2. Tolerance 0.5 (0.02) maximum
3. Input connector P1 mates with Molex housing 09-91-0500 and Molex 2478/2578/8818 series crimp terminal.
4. Output connector P2 mates with Molex housing 09-91-1400 and Molex 2478/2578/8818 series crimp terminal.
5. Connector P3 mates with JST XHP-6 or equivalent.
6. Weight: 1000 grams approx.

A: M4 x 0.7 8 places