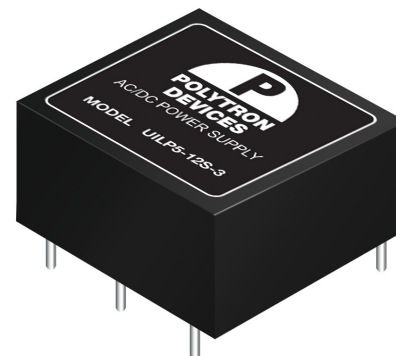


AC-DC POWER SUPPLIES

UNIVERSAL INPUT, 1-5 WATTS SINGLE OUTPUT, 3KV ISOLATION, 1" X 1" MINIATURE PACKAGE

INDUSTRIAL APPLICATIONS

UILP5 SERIES



FEATURES

- Ultra Compact Size 1.0" x 1.0" x 0.64" Package
- Universal Input 90~264VAC
- High Efficiency Up To 85%
- Protection: Short Circuit /Overload/Over Voltage
- Fully Encapsulated Plastic Case
- UL/cUL/IEC/EN60950-1 , 62368-1 Approved
- EMC Standard of EMI EN55032:2015 Approved
- EMC Standard of EMS EN55024:2010 Approved
- ROHS Compliant

SELECTION GUIDE All specifications are typical at 230Vac input, full load and 25°C, unless otherwise noted.

Output Wattage W	Output Voltage Vdc	Output Current mA	Ripple & Noise mV (max)*	Max. Capacitive Load µF	Efficiency %	Model Number*
5.0	3.3	1,515	60	2,200	73	UILP5-3S-X
5.0	5	1,000	60	1,000	80	UILP5-5S-X
5.0	9	555	90	300	81	UILP5-9S-X
5.0	12	416	120	160	81	UILP5-12S-X
5.0	15	333	150	100	82	UILP5-15S-X
5.0	24	208	240	43	82	UILP5-24S-X
5.0	48	104	480	10	84	UILP5-48S-X

* X= ONE digit representing the output power (W) The output power is rising in steps of 1W from 1W to the max. output Power;
When the output power is maximum power, X is omitted.

UILP5 SERIES

Input Specifications			Output Specifications		
Voltage range	90 Min., 264 Max.	AC in, Vo, Io nom	Output voltage accuracy, %	±3 Max.	3.3...5V Models, Vi nom, Io nom
	120 Min., 370 Max.	DC in, Vo, Io nom		±2 Max.	9...48V Models, Vi nom, Io nom
Rated input range, Vac	100-240 Typ.	Vo, Io nom	Minimum load, %	0 Min.	Vi nom
Line frequency, Hz	47 Min., 50 Typ., 63 Max.	Ni nom, Io nom	Line regulation, %	±1 Max.	Io nom, Vi min...Vi max
Inrush current, A	5 Max.	Io nom, Vi:115Vac	Load regulation, %	±1 Max.	
	10 Max.	Io nom, Vi:230Vac	Transient recovery time, us	1,000 Typ.	Vi nom, Io nom = ±0.5 Io nom
Input fuse	VDE/UL/CCC FUSE 2.5A/250V (Slow blow)		Over load protection	Above 110% rated output power, Protection type: Recovers automatically after fault condition is removed	
			Short circuit protection	Recovers automatically after fault condition is removed	
			Over voltage protection	120%-150% rated output Voltage, Protection type: Zener diode clamp	

General Specifications				
Isolation voltage, Vac	Input / Output		3KVac/ 5mA/5Secs	
Isolation resistance, MΩ	Input / Output, @500 Vdc		100 Min.	
Switching frequency, kHz	Vi nom, Io nom		65 Typ.	

Environmental Specifications				
Operating temperature, °C	Refer to Temperature Derating Graph		-25 Min.	70 Max.
Storage temperature range, °C	Non Operational		-40 Min.	85 Max.
Relative humidity	Vi nom, Io nom		95 Max.	

Physical Specifications		EMC Specifications		
Design meet safety standard	UL 62368-1, IEC 62368-1 approved	Specifications	Conditions	Level
Cooling	Free air convection	EMI conduction and radiatio	Compliance to EN55032	Class B
Dimensions, inches (mm)	1 x 1 x 0.63 (25.4 x 25.4 x 16.1)	EMS immunity	Compliance to EN61000	

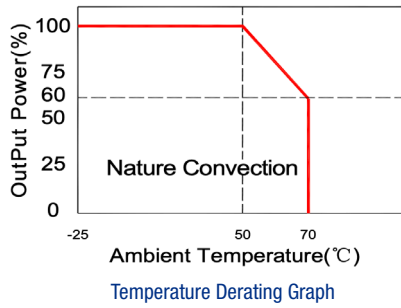
Note:

- Ripple & noise is measured by using 20 MHz bandwidth, measured with a 10uf paralleled with a high-frequency 0.47uf capacitor across each output by full load.
- For further information, please contact Polytron Devices.

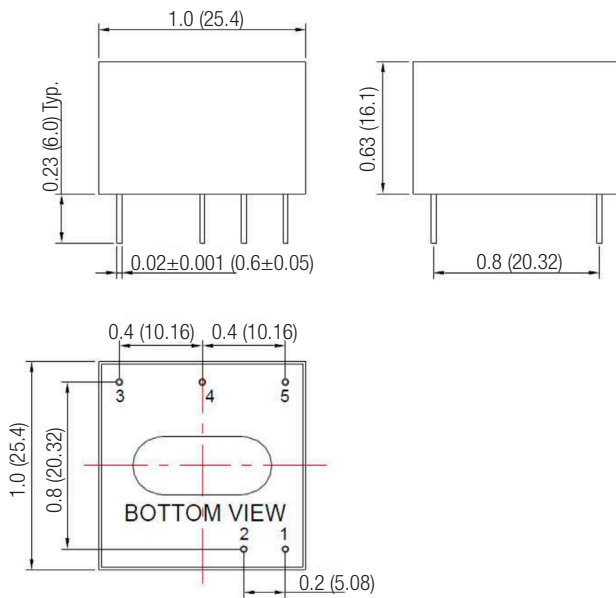
CAUTION: This power module is not internally fused. An input line fuse must always be used.

UILP5 SERIES

Characteristic Curve



Mechanical Drawing

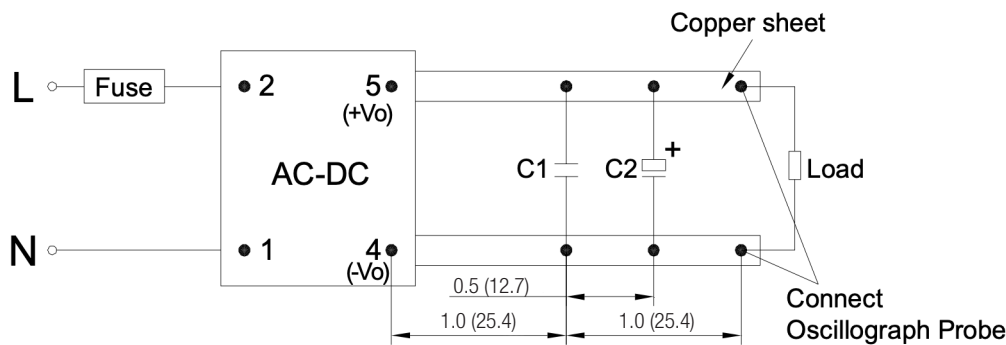


CON1: INPUT CONNECTIONS

PIN	Single
1	ACN
2	ACL
3	NC
4	-Vo
5	+Vo

1. All dimensions in inch (mm)
2. Tolerance: ±0.5, unless otherwise specified

Parallel Lines Measure



C1: Ceramic capacitor, 1uF; C2: Electrolytic capacitor, 10uF

1. All dimensions in inch (mm)