# **IOTEK** 10W AC/DC Module Type

#### Features :

- Green design, No-load power consumption < 0.3W •
- Universal AC input / Full range
- Protections: Short circuit / Over load / Over voltage ٠ Brown-out (Low AC Input voltage)
- Medical safety approved ٠
- Fully isolated plastic case
- Isolation class II
- All using 105°C long life electrolytic capacitors
- High operation temperature up to 70°C
- 100% full load burn-in test •
- Withstand 2G vibration test •
- Cooling by free air convection •
- 3 years warranty







MODEL		ME-10-05	ME-10-12	ME-10-15	ME-10-24
OUTPUT	DC Voltage Range	5V	12V	15V	24V
	Rated Current	2A	0.83A	0.66A	0.42A
	Current Range	0 ~ 2A	0~0.83A	0 ~ 0.66A	0~0.42A
	Rated Power	10W	9.96W	9.9W	10.08W
	Ripple & Noise (max.)	80 mv	150 mv	150 mv	240 mv
	Voltage Tolerance	+5 / -3%			
	Line Regulation Note.8	±1%	±0.5%	±0.5%	±0.5%
	Load Regulation Note.8	±1%	±0.5%	±0.5%	±0.5%
	Setup, Rise Time	100ms, 25ms/230VAC 100ms, 25ms/115VAC at full load			
	Hold Up Time	100ms / 230VAC 25ms / 115VAC at full load			
INPUT	Voltage Range	85V ~ 264VAC 125 ~ 373VDC			
	Frequency Range	47Hz ~ 63Hz			
	Efficiency (Typ.) at 230Vac	77%	79%	80%	82%
	AC Current (Typ.)	0.25 A / 115 VAC 0.15 A / 230 VAC			
	Inrush Current (Typ.)	Cold Start 25A / 115VAC 45A / 230VAC			
Protection	Owend and	Above 110% rated output power			
	Over Load	Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	Over Voltage	115% ~ 145% rated output voltage			
		Protection type : latch-off mode			
Environment	Working Temp.	-20°C ~ 70°C (Refer to output load de-rating curve)			
	Working Humidity	20 ~ 90% RH non-condensing			
	Storage Temp., Humidity	-40 ~ +85°C, 10 ~95% R.H			
	Temp.Coefficient	±0.03%/°C (0~50°C)			
	Vibration	10 ~ 500Hz, 2G 10min/1cycle, period for 60 min each along X,Y,Z axes			
Safety & EMC	Safety Standards	UL60601-1 / TUV EN60601-1 / IEC60601-1 Approved			
	Withstand Voltage	I/P - O/P: 4KVAC			
	Isolation Resistance	I/P - O/P : 100M Ohms / 500VDC			
	EMI Conduction & Radiation	EN55011: 2007+A2: 2007 Class B			
	Harmonic Current	EN61000-3-2: 2006 Class A, EN61000-3-3: 1995+A1: 2001+A2: 2005			
	EMS Immunity	EN60601-1-2: 2001+A1: 2006, IEC61000-4-2,3,4,5,6,8,11 light industry level, criteria A			
Others	MTBF	210.2K HRS Compliance: MIL-HDBK-217F			
	Dimension (L*W*H)(mm)	70x50x22.7			
	Packing	0.105kg; 120Pcs/12.6	kg		
Note	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47 uf parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>Line regulation is measured from low line to high line at rated load.</li> <li>Load regulation is measured from10% to 100% rated load.</li> <li>To power supply is considered a component which will be installed into a final equipment. The final equipment must be</li> </ol>				
	<ul> <li>re-confirmed that it still meets EMC directives.</li> <li>7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time</li> <li>8. The line regulation and load regulation is calculated based on output voltage.</li> </ul>				



# Mechanical Specification

Unit:inch(mm)





## Block Diagram



## **De-rating Curve**



