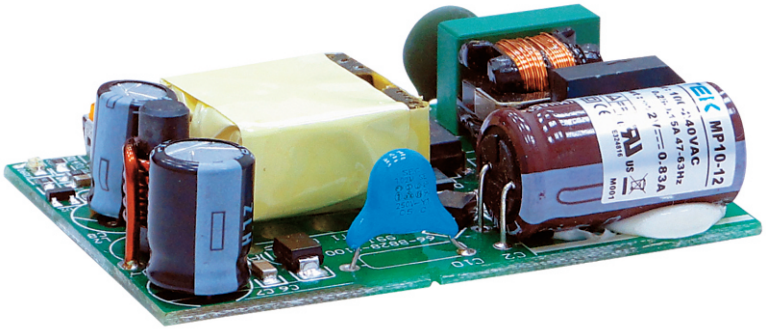
COTEK 10W Open Frame Medical Power Supply MP10 series

Features:

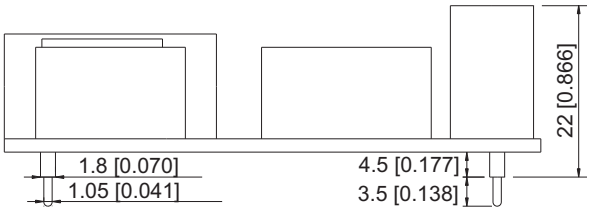
- Universal AC input / Full range
- Medical safety approval: ANSI / AAMI ES 60601-1 / TUV EN 60601-1: 2006; IEC 60601-1 / MOPP
- Isolation class II
- Green design, No-load power consumption < 0.3W
- Protection: Short circuit, Over load, Over voltage
  Brown-out (Low AC Input Voltage)
- High operation temperature up to 70°C
- Withstand 2G vibration test
- 3 years warranty

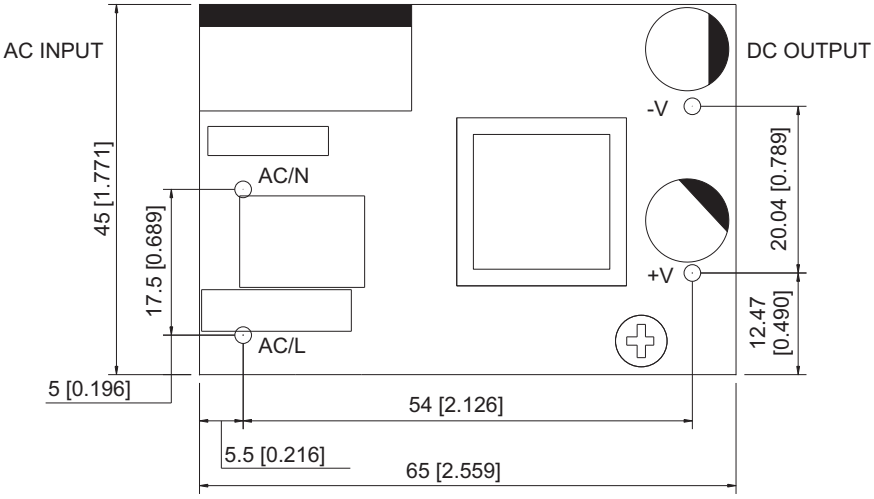


MODEL		MP10-05	MP10-12	MP10-15	MP10-24
Output	DC Voltage Range	5V	12V	15V	24V
	Rated Current	2A	0.83A	0.66A	0.42A
	Current Range	0 ~ 2A	0 ~ 0.83A	0 ~ 0.66A	0 ~ 0.42A
	Rated Power	10W	9.96W	9.9W	10.08W
	Ripple & Noise (Max.)	80mVp-p	150mVp-p	150mVp-p	240mVp-p
	Voltage Adj. Range	±10%			
	Voltage Tolerance	±2%	±1%	±1%	±1%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±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	85 ~ 264VAC, 125 ~ 373VDC			
	Frequency Range	47 ~ 63Hz			
	Efficiency (Typ.) at 230VAC	77%	79%	80%	82%
	AC Current (Typ.)	0.25A / 115VAC, 0.15A / 230VAC			
	Inrush Current (Typ.)	Cold Start 25A / 115VAC, 45A / 230VAC			
Protection	Over Load	Above 110% rated output power			
		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 ~ 70°C (Refer to de-rating curve)			
	Working Humidity	20 ~ 90% RH non-condensing			
	Storage Temp. & Humidity	-40 ~ +85°C, 10 ~ 95% RH			
	Temp. Coefficient	±0.03% / °C (0 ~ 50°C)			
	Vibration	10 ~ 500Hz, 2G 10min. / 1cycle, period for 60min. each along X, Y, Z axes			
Safety & EMC	Safety Standards	Certified UL / cUL (ANSI / AAMI ES60601-1; CAN / CSA-C22.2 No.60601-1); NFPA 99 Certified TUV (EN 60601-1; IEC 60601-1); MOPP approval			
	Withstand Voltage	I/P-O/P: 4KVAC			
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC			
	EMI Conduction & Radiation	Certified EN 55011			
	Harmonic Current	Certified EN 61000-3-2; EN 61000-3-3			
	EMS Immunity	Certified EN 60601-1-2; IEC 61000-4-2, 3, 4, 5, 6, 8, 11			
Others	MTBF	210.2K HRS Certified MIL-HDBK-217F			
	Dimension (WxHxD)	45x22x65 mm / 1.771x 0.866x2.559 inch			
	Packing	0.045kg; 108pcs / 5.86kg / 1.43CUFT			
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. 3. Tolerance: includes setup time tolerance, line regulation and load regulation. 4. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 0% to 100% rated load. 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 7. Length of setup time is measured at first cold start. Turning ON/OFF the power supply continuously may increase the setup time.				

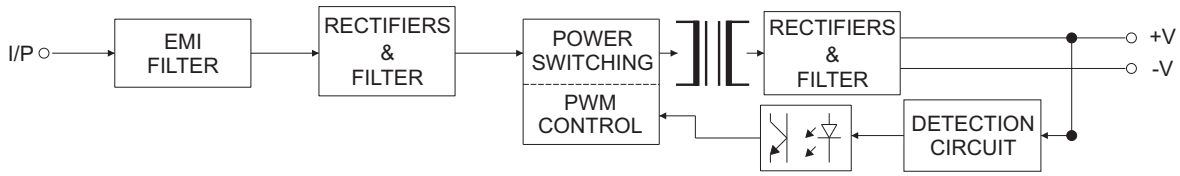
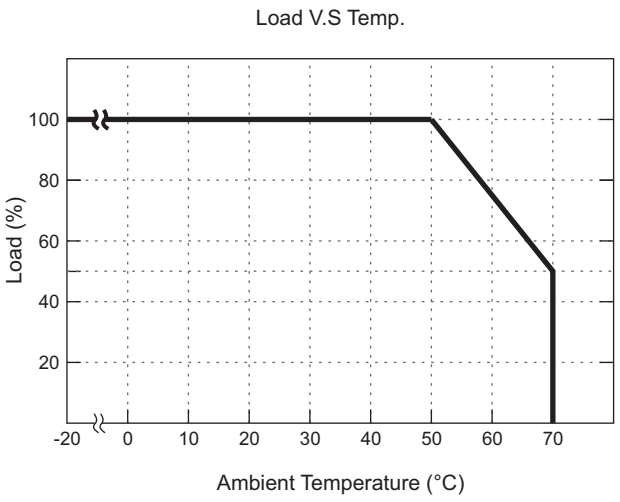
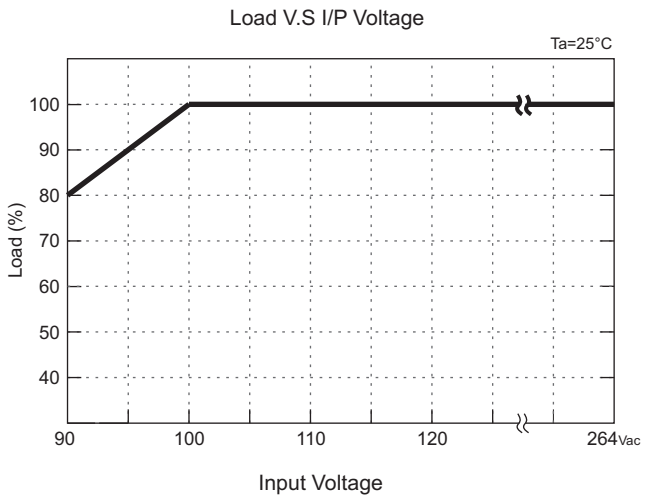
Mechanical Drawings:

Unit : mm[inch]





Block Diagram:



De-rating Curve: