

450 ~ 480 Watts Single/Dual/Triple Output U-bracket Type for Medical

FEATURES

- ◆ EN61000-3-2 class A and D compliant
- ◆ EN55011 & FCC Class B
- ◆ Power Factor 0.98 typical
- ◆ Power Fail Detect (PFD) signal
- ◆ Overvoltage, Thermal, Short-circuit protection
- ◆ Remote sense on output #1 and output #2
- ◆ Remote inhibit - TTL high to disable output



SPECIFICATIONS

Input Voltage Range	90~264VAC
Input Current (rms)	7.1A Max.
Ripple & noise	2% peak to peak maximum on 3.3V & 5.1V 1% peak to peak maximum on other voltage outputs
Efficiency	80% min
Earth leakage/Touch current	240uA/100uA max. @ 264VAC/63Hz
Operating Temperature	0°C ~ +70°C (derated linearly from 100% load @ 50°C to 50% load @ 70°C)
Fan power	12V at 400mA for "U" version ; 12V at 100mA for "E" version
Storage Temperature	-40°C ~ 85°C
Relative Humidity	5% to 95% non-condensing
Protections	OVP, OCP & Short-circuit Protection
Withstand Voltage	5600 VDC from input to output (2 MOPP) 2100 VDC from input to ground (1 MOPP) 700 VDC from output to ground
Safety Standard	UL ES60601-1, CSA C22.2 No. 60601-1, CE
EMC Standard	EN55011, EN55022 Class B EN61000-3-2,-3, EN61000-4-2, 3, 4, 5, 6, 8, 11

All Specifications are Typical at Nominal Line, full Load and 25°C. Unless Otherwise Noted.

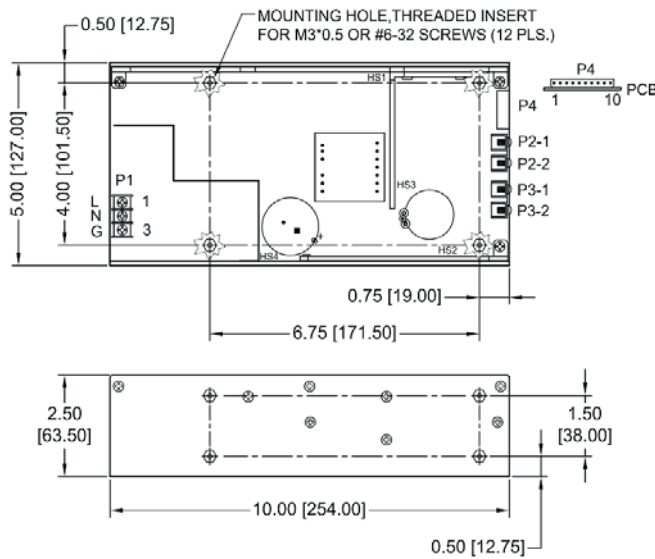
Model Number	Output #1				Output #2				Output #3				Max. Output Power
	V1	Imin	Imax	Tol.	V2	Imin	Imax	Tol.	V3	Imin	Imax	Tol.	
FPM450-S120-z	12V	0A	37.5A	±2%									225W/450W
FPM450-S150-z	15V	0A	30.0A	±2%									225W/450W
FPM450-S240-z	24V	0A	18.75A	±2%									225W/450W
FPM450-S270-z	27V	0A	16.7A	±2%									225W/450W
FPM450-S300-z	30V	0A	15.0A	±2%									225W/450W
FPM450-S400-z	40V	0A	12.0A	±2%									240W/480W
FPM450-S480-z	48V	0A	10.0A	±2%									240W/480W
FPM450-S550-z	55V	0A	8.73A	±2%									240W/480W
FPM450-D020-z	24V	1.0A	12.0A	±2%	12V	1.0A	17A	±5%					225W/450W
FPM450-D021-z	24V	1.0A	12.0A	±2%	15V	0.75A	15A	±5%					225W/450W
FPM450-D022-z	48V	0.5A	6.0A	±2%	24V	0.5A	10A	±5%					225W/450W
FPM450-D023-z	48V	0.5A	6.0A	±2%	12V	1.0A	17A	±5%					225W/450W
FPM450-D024-z	48V	0.5A	6.0A	±2%	15V	0.75A	15A	±5%					225W/450W
FPM450-T030-z	24V	1.0A	12.0A	±2%	12V	1.0A	17A	±5%	3.3V	0A	8A	±4%	225W/450W
FPM450-T031-z	24V	1.0A	12.0A	±2%	15V	0.75A	15A	±5%	3.3V	0A	8A	±4%	225W/450W
FPM450-T032-z	24V	1.0A	12.0A	±2%	12V	1.0A	17A	±5%	5.1V	0A	8A	±4%	225W/450W
FPM450-T033-z	24V	1.0A	12.0A	±2%	15V	0.75A	15A	±5%	5.1V	0A	8A	±4%	225W/450W
FPM450-T034-z	48V	0.5A	6.0A	±2%	12V	1.0A	17A	±5%	3.3V	0A	8A	±4%	225W/450W
FPM450-T035-z	48V	0.5A	6.0A	±2%	15V	0.75A	15A	±5%	3.3V	0A	8A	±4%	225W/450W
FPM450-T036-z	48V	0.5A	6.0A	±2%	12V	1.0A	17A	±5%	5.1V	0A	8A	±4%	225W/450W
FPM450-T037-z	48V	0.5A	6.0A	±2%	15V	0.75A	15A	±5%	5.1V	0A	8A	±4%	225W/450W

Note:

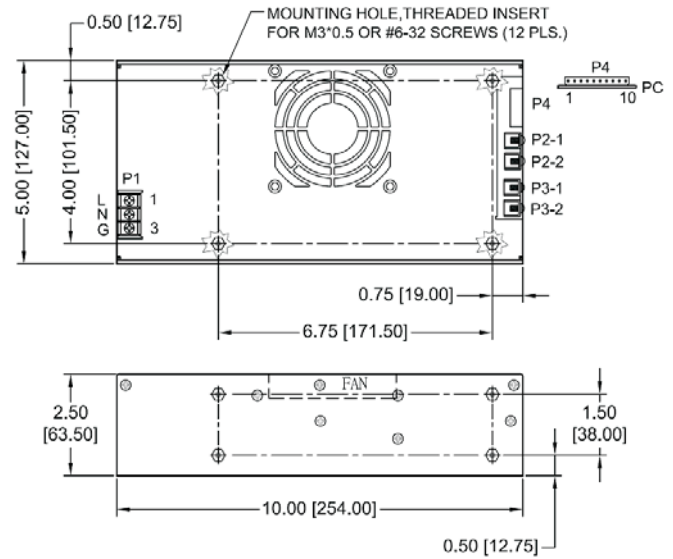
1. z = U for U-bracket, z = E for Enclosed
2. All outputs are floating. They can be connected externally for positive or negative output.
3. Output #1 can be adjusted within 5% of its nominal voltage.
4. Output #3 can be adjusted within 15% of its nominal voltage.
5. 450-480 watts for "E" version with cover and fan assembly. 225-240 watts for "U" version without moving air (maximum current of output #1 & 2 derated to 50%), or 450 watts with 40 CFM forced air provided by user.
6. All models may be operated at no-load. At no-load, output voltage tolerance increases to 10%.

MECHANICAL DRAWING (mm)

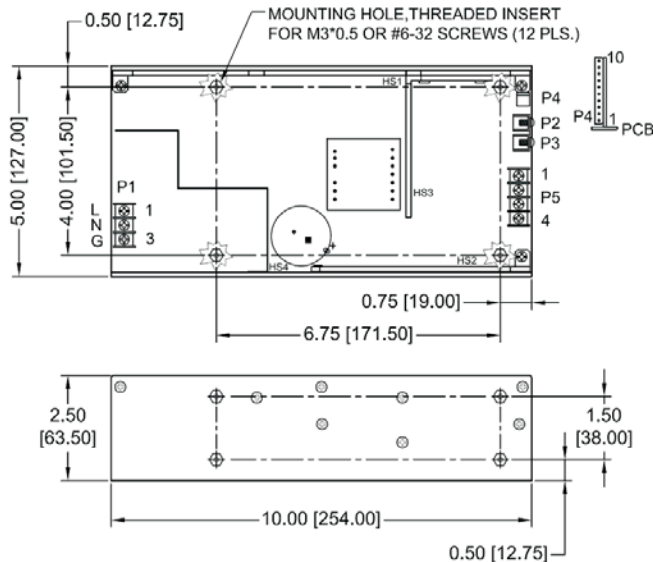
Single Output Models U-bracket Form



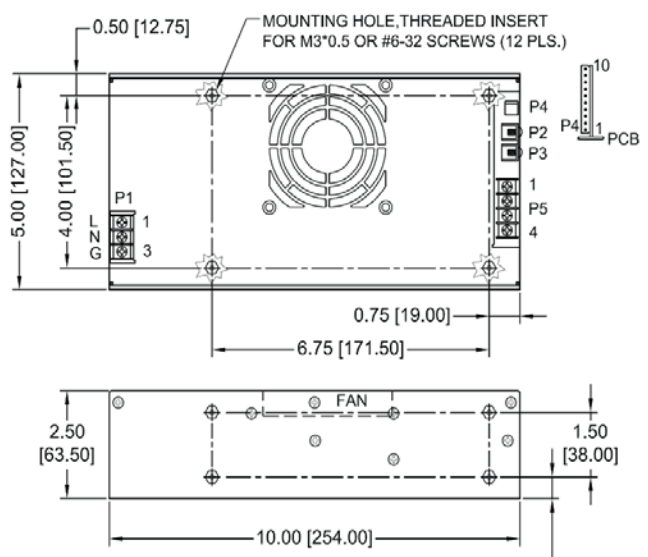
Enclosed Form



Multiple Output Models U-bracket Form



Enclosed Form



PIN CHART

Output	CONN PIN	P1 (AC)			P2	P3	P5			
		1	2	3			1	2	3	4
Single		Live	Neutral	Ground	+V1	V1 Return	N.A.			
Dual		Live	Neutral	Ground	+V1	V1 Return	+V2	V2 Return	N.C.	N.C.
Triple		Live	Neutral	Ground	+V1	V1 Return	+V2	V2 Return	+V3	V3 Return

Output	CONN PIN	P4									
		1	2	3	4	5	6	7	8	9	10
Single		PFD Return	+V1 Sense	-V1 Sense	PFD	Inhibit +V	Inhibit -V	N.C.	N.C.	Fan Return	+12V Fan
Dual		PFD Return	+V1 Sense	-V1 Sense	PFD	Inhibit +V	Inhibit -V	+V2 Sense	-V2 Sense	Fan Return	+12V Fan
Triple		PFD Return	+V1 Sense	-V1 Sense	PFD	Inhibit +V	Inhibit -V	+V2 Sense	-V2 Sense	Fan Return	+12V Fan

Note:

- Dimensions shown in inches [mm] ; Tolerance 0.02 [0.5] maximum
- Input connector P1 is Dinkle DT-35-B01W-03 with M3, nickel plated screws.
- Connector P4 mates with Molex housing 50-37-5103 and pins 5263.
- P2, P2-1, P2-2, P3, P3-1 & P3-2 : M3*0.5 screw connections.
- Output connector P5 is Dinkle DT-35-B01W-04 with M3, nickel plated screws.
- Weight: 1.8Kgs. (3.96 lbs.) approx. for U-bracket form, 2.0 Kgs. (4.4 lbs.) approx. for enclosed form.
- Maximum penetration depth of fixing screws is 4 mm from the outer surface of chassis.