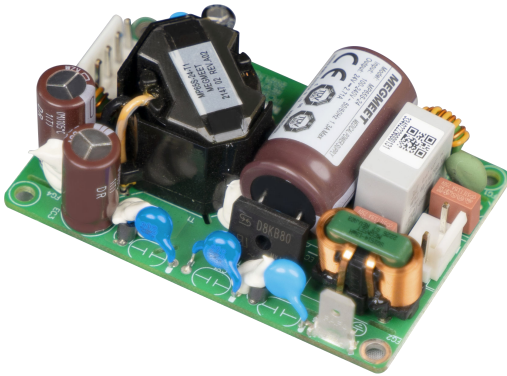


Medical Power Supply

MP65S Series

MEGMEET
www.megmeet.com

65W AC-DC OPEN FRAME



FEATURES

- Medical 60601-1 Safety Approvals
- Small 2" x 3" x 1" Package
- Class I or Class II Construction Compatible
- Medical F-type Approvals for Class I
- High Efficiency up to 92%
- EN55011 / FCC Part 15J Class B Emissions
- 3-Year Warranty



GENERAL DESCRIPTION

MP65S series is a highly integrated AC-DC converter, using the mainstream PI solution with compact size and high power density. The series is compatible with class I and class II structure. It is suitable for BF type medical equipment.

APPLICATIONS



MODELS & RATINGS

MODELS	OUTPUT VOLTAGE	OUTPUT CURRENT	PEAK CURRENT	OUTPUT OVER CURRENT	RIPPLE & NOISE	TOTAL REGULATION
MP65S-12	12V	5.41A	6.0A	>6.0A, <9.5A	120mV	±3%
MP65S-15	15V	4.33A	5.0A	>5.0A, <7.1A	150mV	±3%
MP65S-18	18V	3.61A	4.33A	>4.3A, <6.3A	180mV	±3%
MP65S-24	24V	2.71A	3.25A	>3.25A, <4.75A	240mV	±3%

NOTES

1). Derate output power by 2% per VAC for input voltage < 90vac

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MODEL ENCODING

MP65S	-	xx/xxx	-	abcd
OPEN FRAME 65 Watts		OUTPUT VOLTAGE 12: 12V 165: 16.5V		CUSTOMER CODE OR OTHERS

INPUT ELECTRICAL CHARACTERISTICS

Normal Voltage Range	100-240VAC
Input Voltage Range	90~264Vac (Universal)
Input Frequency	47~63Hz
Input Current	1.3A _{RMS} @100VAC/ 0.65A _{RMS} @240VAC
Inrush Current	80A typical @ 230 VAC, Cold start
Input Protection	Internal T3.15A/250V Fuse (Line&Neutral)

Standby Power	≤0.15W@230Vac/50Hz
Earth Leakage Current(NC)	<100μA @ 264VAC(Class I)
Earth Leakage Current (SFC)	<500μA @ 264VAC(Class I)
Touch Current (NC)	<100μA @ 264VAC
Touch Current (SFC)	<300μA @ 264VAC

OUTPUT ELECTRICAL CHARACTERISTICS

Total Regulation	±3%
Line Regulation	±1.5%
Load Regulation	±2%
Minimum Load	None
Transient Response	±5%,5%-50% or 50%-100%, Slew Rate 0.5A/μS

Ripple & Noise	1% pk-pk typical
Turn-On Delay	2 seconds Max @ 115VAC
Hold-Up Time	>10ms @115VAC Full Load

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SAFETY & EMC

Safety	IEC60601-1, 3.2 Edition
	ANSI / AAMI ES60601-1
	CSA C22.2 No. 60601-1
	CE Mark (LVD)
EMC	IEC60601-1-2 4th Edition
Conduction Emission	EN55011, FCC Part 15 Subpart B
Radiated Emission	EN55011, FCC Part 15 Subpart B
Voltage Fluctuation & Flicker	EN61000-3-3
Harmonic Distortion	EN61000-3-2 Class A
ESD	EN61000-4-2, 8kV contact, 15kV Air Discharge
EFT	EN61000-4-4, Level 3, Criterion A
SURGE	EN61000-4-5 Installation Class 3, Criterion A
DIP ⁽¹⁾	EN61000-4-11
Conducted Immunity	EN61000-4-6, 3VRMS (6Vrms for ISM band), Criterion A
Radiated Immunity	EN61000-4-3, 10V/m, Criterion A
Magnetic Fields Immunity	EN61000-4-8, 30A/m, Criterion A

PROTECTION

Over shoot	5%
Over-Voltage	110-140% , Hiccup, Auto-Recovery
Over-Temperature	>70°C , Latching, Recycle input to recovery
Over-Load	Hiccup, Auto-Recovery
Short Circuit	Hiccup, Auto-Recovery

RELIABILITY & ENVIRONMENTAL REQUIREMENTS

Operating Temperature	-10°C to +50°C
Derating	2.5%/°C, > 50°C, up to 70°C max
Storage Temperature	-40°C to +80°C
Operating Humidity	5% to 95% (non-condensing)
Operating Altitude	5000m
Shock	294 m/s ² (30G), 10ms, 6 times on each of 3axes
Vibration	10-500 Hz, 19.6 m/s ² (2G), 20 mins on 3 axes

DIMENSION & PACKING

Efficiency	89%/90%min @ 115/230 VAC, Full Load
Isolation	4000 VAC – Input to Output; 2xMOPP 1500 VAC – Input to Ground; 1xMOPP 1500 VAC – Output to Ground; 1xMOPP
MTBF	200K Hours, Mil-217F @ 25 °C, Full Load
Weight	95g ref
Dimensions	50.8x76.2x25.4mm
	2x3x1" inch

(1) Power supply DIP voltage sag requirements table:

Drop	Time	Criterion
0%Ut	0%Ut 0.5cycle	A
0%Ut	1cycle	A
70%Ut	25/30 cycles	B
0%Ut	300cycles	C

Medical Power Supply

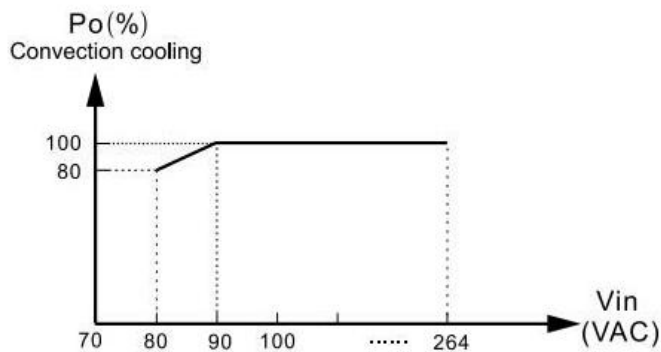
MP65S Series

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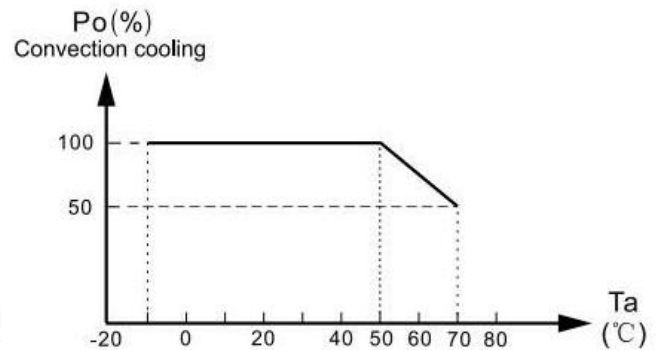
65W AC-DC OPEN FRAME

DERATING CURVE

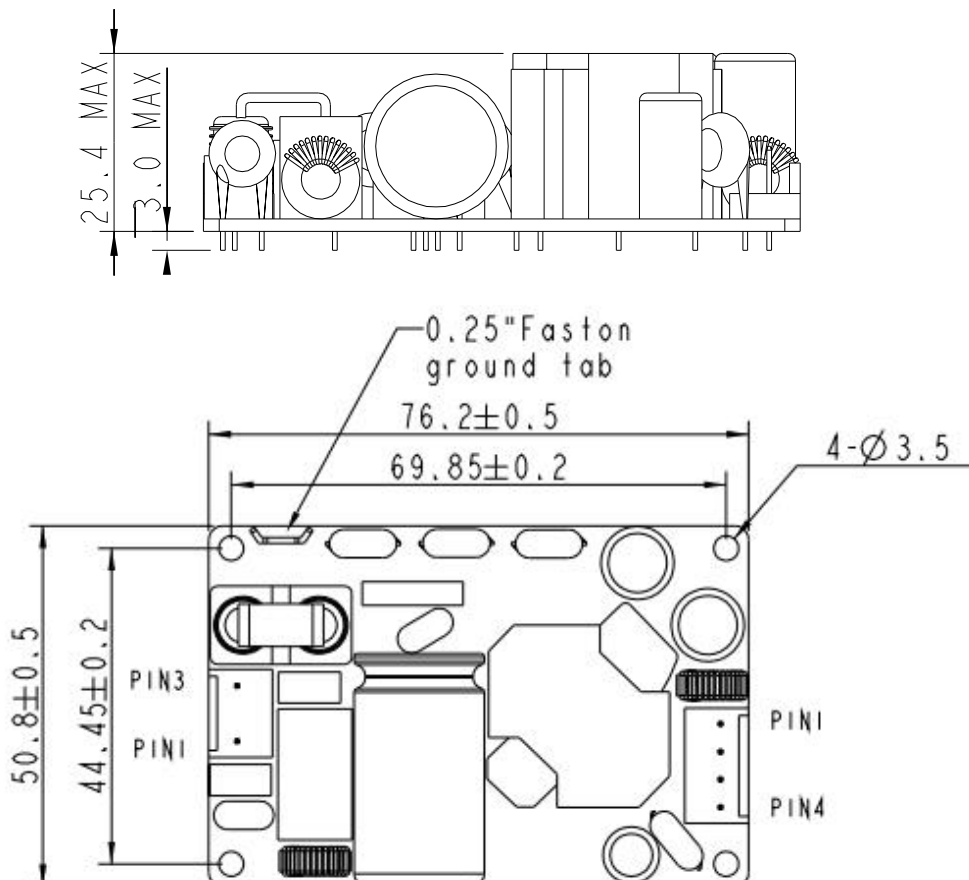
OUTPUT POWER VS INPUT VOLTAGE



OUTPUT POWER VS AMBIENT TEMPERATURE



MECHANICAL AND CONNECTOR INFORMATION

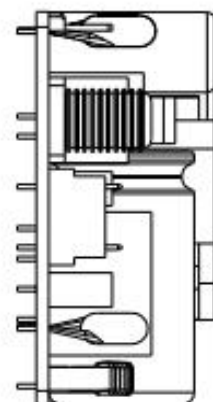


AC INPUT: CN1
JST P/N: B2P3-VH (LF)(SN)
Mates With: JST VHR-3N

Pin1	Neutral
pin3	Line
0.25" Faston	Earth

DC OUTPUT: CN2
JST P/N: B4P-VH (LF)(SN)
Mates With: JST VHR-4N

Pin1,2	RTN
pin3,4	+V



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GLOBAL OPERATION AND SERVICE



MANUFACTURER

CHINA

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THAILAND

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Pluakdaeng, Rayong 21140, Thailand

TECHNICAL SUPPORT

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