

GSM11 MEDICAL SERIES SINGLE OUTPUT POWER SUPPLY

Low Power Medical Power Supplies 11 Watt AC/DC Universal Input Power Supply

SUMMARY

- 85 264 Vac input range (100 240 Vac nominal)
- Overvoltage and short circuit protection
- Approved to UL, CSA and EN Standards
- Class II input
- RoHS Compliant (G suffix models)

The GSM11 Series is an 11 W universal input AC/DC power supply in an industry leading small footprint. With the medical approvals the GSM11 is ideal for a variety of medical device applications including small single board computers, battery charging, and running small motors, pumps, and solenoids. The series, with full approval to EN60601-1 and EN60950-1 Standards, improves design-in time and reduces end system compliance costs.



All specifications are typical at nominal input, full load at 25 °C unless otherwise stated

SPECIFICATIONS

OUPUT SPECI	FICATIONS	
Output Power	Natural Convection	11 Watts
Total Regulation		See table
Turn on time		2.0 s max.
Transient response	Main output 50% 0.2 A/μs	5% max. dev. 1 ms recovery to 1%
Temperature Coef- ficient		+/-0.03%/oC
Overvoltage protection		110 - 155%
Short Circuit protection	Power cycling	135 % +/- 20 %

INPUT SPECIFIC		
Input Voltage range	Universal input	100-240 nom (85 - 264 max) Vac
Input frequency		55 Hz +/- 10 Hz
Input surge current		35 A max.
Input current	120 Vac	0.23 A
	230 Vac	0.16 A
Input fuse	F1	1.0 A

EMC INFORM	ATION	
Conducted emissions	EN55011	Level B
Radiated emissions	EN55011	Level A
Line freq. harmonics	EN61000-3-2	Complies
Voltage fluctuations	EN61000-3-3	Complies
ESD Air	EN61000-4-2	8 kV air
ESD Contact	EN61000-4-2	4 kV contact
Radiated immunity	EN61000-4-3	3 V/m
Fast Transients (EFT)	EN61000-4-4	2 kV
Line surge immunity	EN61000-4-5	1 kV differential
Conducted immunity	EN61000-4-6	3 Vrms
Power freq. mag. field	EN61000-4-8	3 A/m
Voltage dip immunity	EN61000-4-11	5 cycles 40 % vnom 4.0 Watts. 25 cycles 70 % vnom 11 W

ENVIRONMENTA		
Thermal Performance	operating ambient (see ratings chart)	0-70 °C
	non-operating	-40 to +85 °C
	0 - 50 °C Convection cooled	11 Watts
	50 -70 °C ambient Convection cooled	derate to 50%
Relative Humidity	non-condensing	5% - 95% RH
Maximum Altitude	operating / non-operating	10,000 ft. / 40,000 ft. max.
Vibration	5 Hz- 500 Hz	2.5 g rms
Shock	per MIL-STD-810E	516.4 part IV

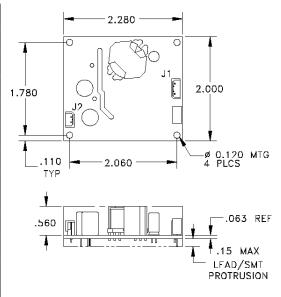
GENERAL SPECIFICATIONS		
Hold-up time	120 Vac, 60 Hz	>31 ms at 11 Watts output
Efficiency	120 Vac 11 W output	67 - 77 %
isolation voltage	input to ouput	4000 Vac 1500 Vac
Switching frequency	fixed	80 KHz, +/- 5 KHz
Safety Approvals		UL/EN/IEC 60601-1 CSA22.2 No.601 UL/EN/IEC 60950-1 CSA22.2 No.60950-1
Maximum weight		50 g (0.1 lbs)

MODEL NUMBER Shown with opt A Connectors	50°C Convection	RIPPLE	REGULATION	ADJUSTMENT
GSM11-3AAG	3.3 V 2.0 A	50 mV	2%	+/- 5%
GSM11-5AAG	5.1 V 2.2 A	50 mV	2%	+/- 5%
GSM11-12AAG	12 V 0.92 A	120 mV	2%	+/- 5%
GSM11-15AAG	15 V 0.73 A	150 mV	2%	+/- 5%
GSM11-24AAG	24 V 0.46 A	240 mV	2%	+/- 5%
GSM11-28AAG	28 V 0.39 A	280 mV	2%	+/- 5%

NOTES

- 1. Convection cooling rating is 11 Watts (7 Watts on 3.3 V unit)
- 2. When the input voltage is less than 90 Vac the operating temperature range is 0°C to 40°C. The ripple and regulation specs. may not be met.
- 3. Peak output rating is 15 Watts for 1 minute, 10% duty cycle. (7 Watts on 3.3 V unit)
- 4. Noise 0.5% RMS, 1% Pk-Pk, 20 MHz Bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply.
- 5. Installation data is online at www.condorpower.com

GSM11 CONN			
AC INPUT	OPTION A	OPTION B	OPTION T
Connector	2.5 mm SPOX	0.025" Square pin locking	Screw terminal block
Part Num	MOLEX 22-43-8030	MOLEX 22-23-2031	Weco 950-T-DS/02
Mate	MOLEX 50-37-5033	MOLEX 22-01-2035	26-16 Gage
Pins	MOLEX 08-70-1040	MOLEX 08-50-0113	N/A
Kit	18-30234-111A	18-30234-111B	N/A
	Pin 1 =neutral Pin 3 =line	Pin 1 =neutral Pin 3 =line	Pin 1 =neutral Pin 2 =line
DC OUTPUT	OPTION A	OPTION B	OPTION T
Connector	2.5 mm SPOX	0.025" Square pin locking	Screw terminal block
Part Num	MOLEX 22-43-8020	MOLEX 22-23-2021	Weco 950-T-DS/02
Mate	MOLEX 50-37-5023	MOLEX 22-01-2025	26-16 Gage
Pins	MOLEX 08-70-1040	MOLEX 08-50-0113	N/A
Kit	18-30234-112A	18-30234-112B	N/A
	Pin 1=+Vout Pin 2 =Return	Pin 1=+Vout Pin 2 =Return	Pin 1=+Vout Pin 2 =Return



GSM11 Part Numbering Scheme GSM11-xxYYG

xx=Volts (5,12,etc)

YY=In-out connectors e.g. AA, TB, BA G=RoHS Compliant

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