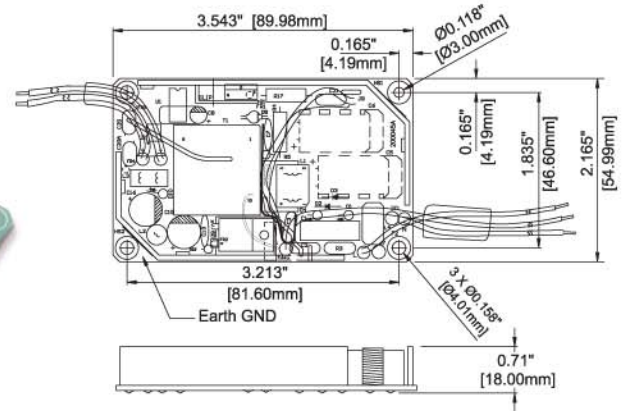
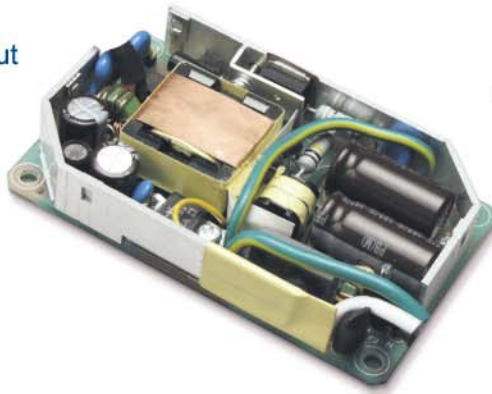


# MSM 20 Series

## 20 Watt Medical Grade Power Supply

- Wide Range AC Input
- Fully Regulated DC Output
- High Efficiency
- Output Floating
- Medical Grade Approval
- 5 Year Warranty



### SPECIFICATIONS

#### INPUT

Voltage	100 - 240 VAC		
Current	0.38 Amp @ 100 VAC		
Frequency	50 - 60 Hz		
Max. Earth	Test Voltage	Normal	Single
Leakage current	132 VAC 60 Hz	90 $\mu$ A	120 $\mu$ A
	264 VAC 50 Hz	150 $\mu$ A	200 $\mu$ A

#### OUTPUT

Total regulation	< +/- 5%
Set point accuracy	< +/- 3% at 60% load
Hold up time	15 ms min at full load, 115 VAC
Transient response	2 ms for 50% to 100% load change
Over voltage protection	Built-in
Over current protection	Built-in
Short circuit protection	Pulsing mode, auto recovery
Ripple/noise (V <sub>p-p</sub> )	1% (20 MHz bandwidth)

#### INPUT AND OUTPUT CONNECTIONS/POLARITY

- Input ground connection = 8.0" min green/yellow UL 1015 wire
- Input line connection = 8.0" min white UL 1015 wire
- Input neutral connection = 8.0" min black UL 1015 wire
- Output +V connection = 8.0" min red UL 1015 wire
- Output common connection = 8.0" min black UL 1015 wire

#### ENVIRONMENTAL

Operating temperature	0° C to 50° C
Storage temperature	-55° C to 85° C
Weight	0.30 lbs

#### SAFETY

- cRUs
- UL 60601-1
- CSA C22.2 No.601.1-M90
- CB per IEC 60601-1
- CE marked to LVD
- Class I

#### EMI/EMC

Emissions	EN55011 and FCC Part 15, Class B. EN61000-3-2, -3
Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11

Model No.	Volt	Power	Current	Eff @ 115VAC (Typ)
MSM2012	12V	20W	1.67A	80%
MSM2015	15V	20W	1.34A	80%
MSM2024	24V	20W	0.84A	80%