

# WALL PLUG IN POWER SUPPLY WITH INTERCHANGEABLE PLUGS

## SINGLE, 15-24 WATTS

MEDICAL APPLICATIONS  
MIP1019 SERIES



### FEATURES

- DoE VI Compliance
- RoHS Compliance
- Dimensions 2.46" × 1.61" × 1.34"
- Interchangeable Plug
- Over Voltage Protection Built-in
- Short Circuit Protection Built-in
- MTBF > 30,000Khrs
- Medical Safety Approvals: UL/CUL 60601-1, EN60601-1 and IEC60601-1 3rd edition, FCC, CE, CB

### SELECTION GUIDE

All specifications are typical at 230Vac input, full load and 25°C, unless otherwise noted.

Max. Output Power W	Output Voltage (Vo) Vdc	Min. Load (Io) A	Max. Load (Io) A	Load Regulation %	Line Regulation %	Ripple & Noise mV	Model Number*
15	5 - 8	0	3.0	5	±1	100	MIP1019A5RS
20	9 - 13	0	2.0	5	±1	180	MIP1019B9RS
20	14 - 19	0	1.42	5	±1	200	MIP1019C14RS
20	20 - 27	0	1.0	5	±1	250	MIP1019D20RS
20	28 - 35	0	0.71	5	±1	280	MIP1019E28RS
20	36 - 48	0	0.55	5	±1	360	MIP1019F36RS
18	5 - 8	0	3.0	5	±1	100	MIP1019G5RS
24	9 - 13	0	2.0	5	±1	180	MIP1019H9RS
24	14 - 19	0	1.71	5	±1	200	MIP1019J14RS
24	20 - 27	0	1.20	5	±1	250	MIP1019K20RS
24	28 - 35	0	0.85	5	±1	280	MIP1019M28RS
24	36 - 48	0	0.66	5	±1	360	MIP1019N36RS

Please see mechanical drawing page for for plug options.

#### \*MIP1019 X Y

X: Output Range: A-F: Up to 20 Watts

A: 5-8  
B: 9-13  
C: 14-19  
D: 20-27  
E: 28-35  
F: 36-48

G-N: Up to 24 Watts

G: 5-8  
H: 9-14  
J: 14-19  
K: 20-27  
M: 28-35  
N: 36-48

Y: Interchangeable Plug: USA: "U"

UK: "K"  
SAA: "A"  
South Africa: "S"  
China: "C"

## MIP1019 SERIES

Input Specifications		Output Specifications	
Input range, Vac	100 - 240	Over voltage protection	Auto-recovery
Frequency, Hz	50 - 60	Short circuit protection	Auto-recovery
Input current, A	≤ 0.8	Over current protection	Auto-recovery
Inrush current, A	≤ 80 at cold start		
Efficiency	Meet DOE VI, CoC Tier 2		
Hold-up time, ms	≥ 8.3		
Turn on time, s	≤ 3.0		

Environmental Specifications			
Operating temperature, °C		0 Min.	+40 Max.
Storage temperature, °C		-20 Min.	+85 Max.
Operating humidity, %		+10 Min.	+90 Max.
Storage humidity, %		+5 Min.	+95 Max.

Physical Specifications	
Design meet safety standard	UL/CUL 60601-1, EN60601-1 and IEC60601-1 3rd edition, FCC, CE, CB
Weight, g	150
Dimensions, inches (mm)	2.46 × 1.61 × 1.34 (62.5 × 41 × 34)

**Note:**

1. Ripple noise is measure by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.1μF ceramic capacitor and parallel with a 47μF aluminum capacitor at full load and nominal line.
2. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
3. Max Output Power (W) ≥ Vo × Io.

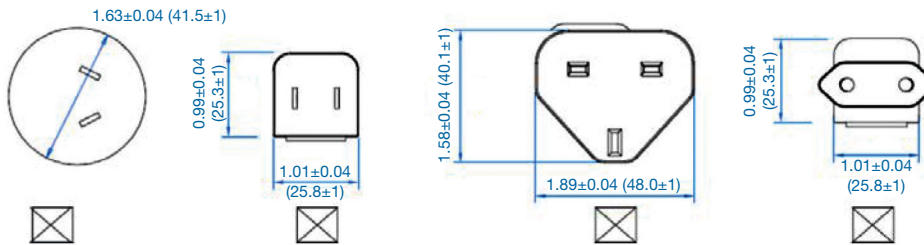
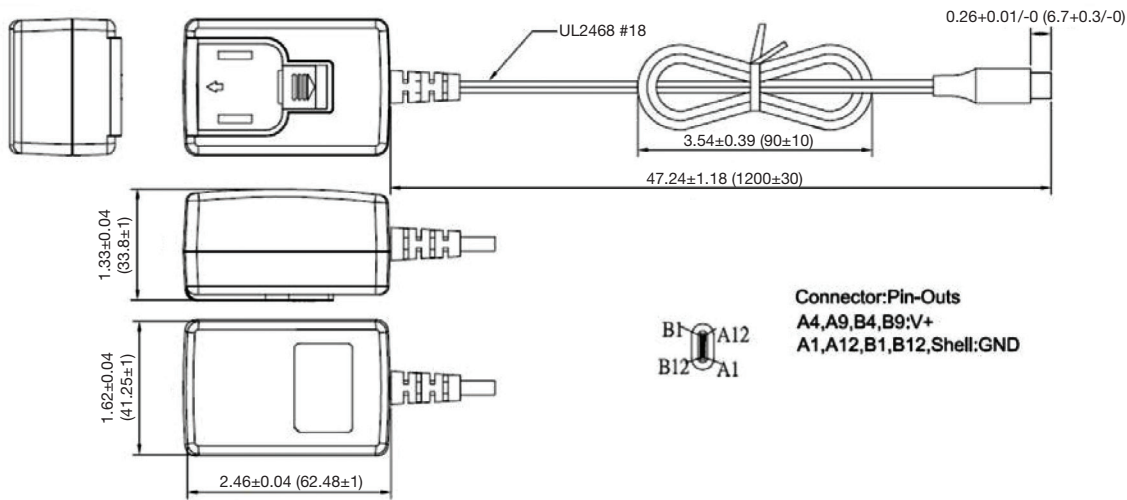
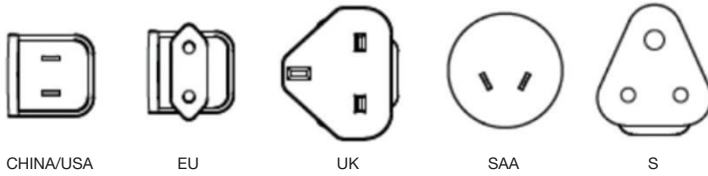
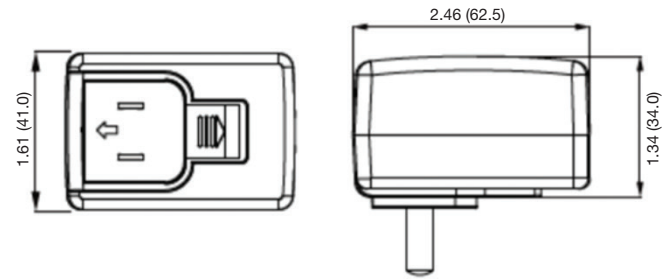
**CAUTION:** This power module is not internally fused. An input line fuse must always be used.

# MIP1019 SERIES

## Mechanical Drawing


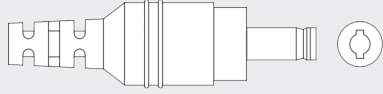







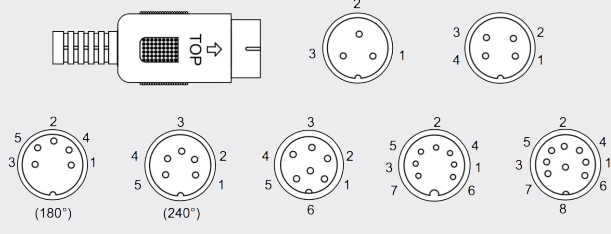
PLUG	SUFFIX
USA	U
China	C
Europe	EU
United Kingdom	K
South Africa	S
Australia	SAA

1. All dimensions in inch (mm)
2. Tolerance :x.xx±0.02 (x.x±0.5)  
x.xxx±0.01 (x.xx±0.25)



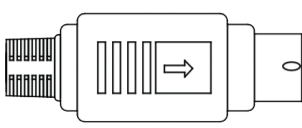
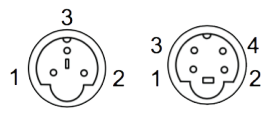
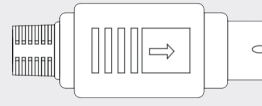

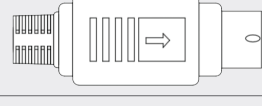

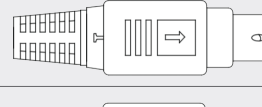
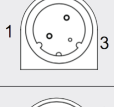
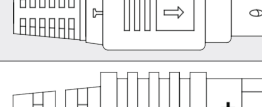
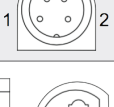
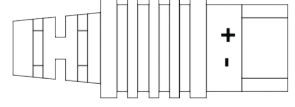
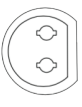
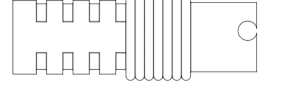

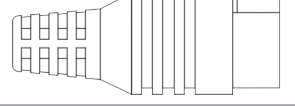
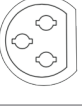
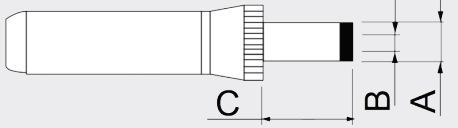
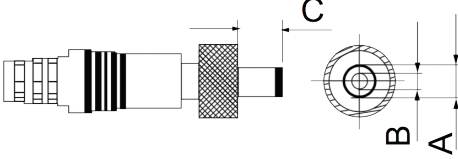
**MIP1019 SERIES**

**Options Available**

Code	Plug Type	Specification	Outline/ Drawing
00	Strip and Tined	NC	
01	Barrel Type	5.5 × 2.1	
02		5.5 × 2.5	
03		4.75 × 1.7	
04		4.0 × 1.7	
05		3.5 × 1.35	
06		2.35 × 0.7	
07		6.3 × 3.0	
08		6.5 × 1.4	
11		Barrel Type Right Angle	5.5 × 2.1
12	5.5 × 2.5		
13	4.75 × 1.7		
14	4.0 × 1.7		
15	3.5 × 1.35		
16	2.35 × 0.7		
17	6.3 × 3.0		
18	6.5 × 1.4		
21	Din (male)	3Pin	
22		4Pin	
23		5Pin(180)	
24		5Pin(240)	
25		6Pin	
26		7Pin	
27		8Pin	

**MIP1019 SERIES**

**Options Available (cont.)**

Code	Plug Type	Specification	Outline/ Drawing
31	Mini-Din (male)	3Pin	 
32		4Pin	
33		5Pin	
34		6Pin	
35		7Pin	
36		8Pin	
41	Power-Mini Din (male)	3Pin (Molding)	 
42		4Pin (Molding)	 
45		3Pin (Assembly/Lock Type)	 
46		4Pin (Assembly/Lock Type)	 
61	Interchangable Connector	2Pin	 
62		2Pin	 
63		3Pin	 
71	Switchcraft Locking Type	A:5.5, B:2.5, C:0.375" (9.52mm)	
72		A:5.5, B:2.5, C:0.475" (12.06mm)	
73		A:5.5, B:2.1, C:0.375" (9.52mm)	
74		A:5.5, B:2.1, C:0.475" (12.06mm)	
81	DC Jack with Screw	A:5.5, B:2.1, C:7.5	
82		A:5.5, B:2.1, C:10.1	
91	Cigarette Lighter		