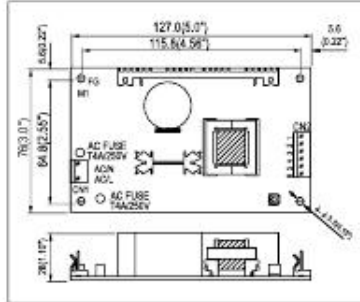


## 45W 1~3 Output Medical Type

- Universal AC input / Full range
- Medical safety approved
- Protections: Short circuit / Overload / Over voltage
- Low leakage currents 0.3mA
- Approvals: UL / CUL / TUV / CB / CE
- Fixed switching frequency at 45kHz
- 100% full load burn-in test
- 3 years warranty

UL US CB CE



- AC input voltage range .... 90~264VAC; 120~370VDC  
 AC inrush current ..... Cold start, 20A at 115VAC, 40A at 230VAC  
 DC adjustment range ..... CH1:  $\pm 10\%$  rated output voltage  
 Overload protection ..... 53~75W hiccup mode, auto-recovery  
 Over voltage protection .... CH1: 115%~135% rated output voltage  
 Leakage current ..... Less than 0.3mA at 264VAC  
 Setup, rise, hold up time .. 800ms, 30ms, 50ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 4kVAC, I/P - FG: 1.5kVAC, 1 minute  
 Working temperature .....  $-10^{\circ}\text{C}$ ~ $60^{\circ}\text{C}$  (refer to output derating curve)  
 Safety standards ..... UL2601-1, TUV EN60601-1, IEC60601-1 approved  
 EMC standards ..... EN55011 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, EN60601-1-2, ENV50204  
 Connection ..... 2P,6P/ 3.96mm pitch, Molex P/N: 5277-02, 5273-06  
 Packing ..... 0.18kg ; 72pcs/ 15.1kg / 1.35CUFT (MPS-45)  
 0.20kg ; 72pcs/ 17.4kg / 1.35CUFT (MPD-45)  
 0.21kg ; 72pcs/ 18.0kg / 1.35CUFT (MPT-45)

### ◆ Single Output

Model No.	Output	Tol.	R&N	Effi.
MPS-45-3.3	3.3V, 0~8.0A	$\pm 3\%$	80mV	65%
MPS-45-5	5V, 0~8.0A	$\pm 3\%$	100mV	72%
MPS-45-7.5	7.5V, 0~5.4A	$\pm 3\%$	100mV	75%
MPS-45-12	12V, 0~3.7A	$\pm 2\%$	100mV	76%
MPS-45-13.5	13.5V, 0~3.3A	$\pm 2\%$	100mV	76%
MPS-45-15	15V, 0~3.0A	$\pm 2\%$	100mV	77%
MPS-45-24	24V, 0~1.9A	$\pm 2\%$	100mV	78%
MPS-45-27	27V, 0~1.7A	$\pm 2\%$	100mV	78%
MPS-45-48	48V, 0~1.0A	$\pm 2\%$	100mV	78%

### ◆ Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPD-45A	5V, 0.4~5.0A	$\pm 4\%$	60mV	76%	40W
	12V, 0.2~2.5A	$\pm 7\%$	120mV		
MPD-45B	5V, 0.4~5.0A	$\pm 4\%$	60mV	78%	45W
	24V, 0.2~1.8A	$\pm 7\%$	150mV		

### ◆ Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPT-45A	5V, 0.4~5.0A	$\pm 4\%$	60mV	73%	41W
	12V, 0.2~2.5A	$\pm 7\%$	120mV		
	-5V, 0.0~0.5A	$\pm 5\%$	60mV		
MPT-45B	5V, 0.4~5.0A	$\pm 4\%$	60mV	75%	43W
	12V, 0.2~2.5A	$\pm 7\%$	120mV		
	-12V, 0.0~0.5A	$\pm 5\%$	100mV		
MPT-45C	5V, 0.4~5.0A	$\pm 4\%$	60mV	75%	44W
	15V, 0.2~2.3A	$\pm 7\%$	120mV		
	-15V, 0.0~0.5A	$\pm 5\%$	100mV		

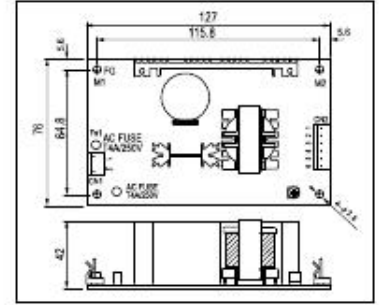
## 65W 1~3 Output Medical Type

- Universal AC input / Full range
- Medical safety approved
- Protections: Short circuit / Overload / Over voltage
- Low leakage currents  $\leq 0.3\text{mA}$
- Fixed switching frequency at 45kHz
- 100% full load burn-in test
- 3 years warranty

UL US CB CE



127x 76x 42 mm



- AC input voltage range .... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 20A at 115VAC, 40A at 230VAC  
 DC adjustment range ..... CH1:  $\pm 10\%$  rated output voltage  
 Overload protection ..... 73~105W hiccup mode, auto-recovery  
 Over voltage protection .... CH1: 115%~135% rated output voltage  
 Leakage current ..... Less than 0.3mA at 264VAC  
 Setup, rise, hold up time .. 800ms, 30ms, 50ms at full load and 230VAC  
 Withstand voltage ..... I/P-O/P: 4kVAC, I/P-FG: 1.5kVAC, 1 minute  
 Working temperature .....  $-10^{\circ}\text{C}$ ~ $+60^{\circ}\text{C}$  (refer to output derating curve)  
 Safety standards ..... UL2601-1, TUV EN60601-1, IEC60601-1 approved  
 EMC standards ..... EN55011 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, EN60601-1-2, ENV50204  
 Connection ..... 2P, 6P/ 3.96mm pitch, Molex: 5277-02, 5273-06  
 Packing ..... 0.23kg ; 54pcs/ 14.6kg / 1.35CUFT (MPS-65)  
 0.25kg ; 54pcs/ 16.0kg / 1.35CUFT (MPD-65)  
 0.27kg ; 54pcs/ 16.8kg / 1.35CUFT (MPT-65)

### ◆ Single Output

Model No.	Output	Tol.	R&N	Effi.
MPS-65-3.3	3.3V, 0~12A	$\pm 3\%$	80mV	66%
MPS-65-5	5V, 0~12A	$\pm 3\%$	100mV	74%
MPS-65-7.5	7.5V, 0~8.0A	$\pm 3\%$	100mV	76%
MPS-65-12	12V, 0~5.2A	$\pm 2\%$	100mV	77%
MPS-65-13.5	13.5V, 0~4.7A	$\pm 2\%$	100mV	78%
MPS-65-15	15V, 0~4.2A	$\pm 2\%$	100mV	79%
MPS-65-24	24V, 0~2.7A	$\pm 2\%$	100mV	80%
MPS-65-27	27V, 0~2.4A	$\pm 2\%$	100mV	80%
MPS-65-48	48V, 0~1.35A	$\pm 2\%$	100mV	80%

### ◆ Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPD-65A	5V, 0.4~7.0A	$\pm 4\%$	60mV	75%	61W
	12V, 0.2~3.2A	$\pm 7\%$	150mV		
MPD-65B	5V, 0.4~6.0A	$\pm 4\%$	60mV	78%	66W
	24V, 0.2~2.6A	$\pm 7\%$	150mV		

### ◆ Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPT-65A	5V, 0.4~7.0A	$\pm 4\%$	60mV	74%	60W
	12V, 0.2~3.2A	$+10\%$ , $-7\%$	120mV		
	-5V, 0.0~0.7A	$\pm 5\%$	60mV		
MPT-65B	5V, 0.4~7.0A	$\pm 4\%$	60mV	74%	64W
	12V, 0.2~3.2A	$+10\%$ , $-7\%$	160mV		
	-12V, 0.0~0.7A	$\pm 5\%$	100mV		
MPT-65C	5V, 0.4~7.0A	$\pm 4\%$	60mV	74%	65W
	15V, 0.2~2.6A	$+10\%$ , $-7\%$	180mV		
	-15V, 0.0~0.7A	$\pm 5\%$	100mV		

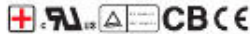
# Open Frame

120~200W 1~4 Output Medical Type



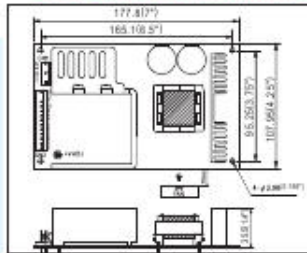
## 120 & 200W 1~4 Output Medical Type

- Universal AC input / Full range
- PF > 0.95@230VAC (200W)
- Protections: Short circuit / Overload / Over voltage / OTP (200W)
- Leakage currents 180uA
- Built-in remote sense and remote ON/OFF control (200W)
- PG / PF signal output (optional for 120W)
- 80W / 140W free air convection, 120W / 200W with 25CFM forced air
- 100% full load burn-in test
- 3 years warranty
- Suitable for medical & IT applications



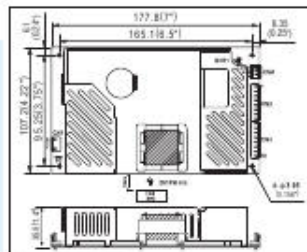
120W

177.8x 108x 35.5mm



200W

177.8x 107.2x 35.5 mm



- AC input voltage range ..... 90~264VAC; 127~370VDC  
 AC inrush current ..... Cold start, 35A at 115VAC, 60A at 230VAC  
 DC adjustment range ..... CH1: -5~+10% rated output voltage  
 Overload protection ..... 110~160% hiccup mode, auto-recovery  
 Over voltage protection ..... CH1: 115%~140% rated output voltage  
 Leakage current ..... Less than 180uA at 264VAC  
 Setup, rise, hold up time ..... 1000ms, 20ms, 16ms at full load and 230VAC  
 Withstand voltage ..... I/P - O/P: 4kVAC, I/P - FG: 1.5kVAC, 1 minute  
 Working temperature ..... -20°C~70°C (refer to output derating curve)  
 Safety standards ..... UL60601-1, TUV EN60601-1, IEC60601-1 approved; Design refer to UL60950-1, TUV EN60950-1  
 EMC standards ..... EN55011/EN55022 class B, EN61000-4-2,3,4,5,6,8,11, EN61000-3-2,3, EN60601-1-2, ENV50204, EN61000-6-2  
 Connection ..... 5P, 13P / 3.96mm pitch, Molex 5273-05, 5273-13 (120W)  
 3P, 20P / 3.96mm pitch, JST B3P/VH, Molex 5566-20 (MPS-200)  
 3P, 8Px2 / 3.96mm pitch, JSTB3P / B8Px2-VH (MPD/T/Q-200)  
 Packing ..... 0.55kg / 24pcs / 14.5kg / 1.04CUFT (120W)  
 0.66kg / 24pcs / 16.8kg / 1.04CUFT (200W)

### Single Output

Model No.	Output	Tol.	R&N	Effi.
MPS-120-3.3	3.3V, 0~24A	±3%	80mV	68%
MPS-120-5	5V, 0~22A	±3%	80mV	73%
MPS-120-12	12V, 0~10A	±2%	100mV	77%
MPS-120-15	15V, 0~8.0A	±2%	100mV	79%
MPS-120-24	24V, 0~5.0A	±2%	120mV	81%
MPS-120-48	48V, 0~2.5A	±2%	120mV	82%

Model No.	Output	Tol.	R&N	Effi.
MPS-200-3.3	3.3V, 0~40A	±2%	80mV	77%
MPS-200-5	5V, 0~40A	±2%	80mV	81%
MPS-200-12	12V, 0~16.7A	±2%	100mV	84%
MPS-200-15	15V, 0~13.4A	±2%	100mV	85%
MPS-200-24	24V, 0~8.4A	±1%	150mV	86%
MPS-200-48	48V, 0~4.2A	±1%	200mV	87%

### Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPD-120A	5V, 2.0~12A	±2%	80mV	75%	110W
	12V, 0.5~6.0A	±7%	120mV		
MPD-120B	5V, 2.0~12A	±2%	80mV	76%	120W
	24V, 0.3~3.2A	±8%	250mV		

### Dual Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPD-200A	5V, 4.0~24A	±2%	80mV	82%	196W
	12V, 0.8~9.6A	+8%, -5%	120mV		
MPD-200B	5V, 4.0~24A	±2%	80mV	83%	196W
	24V, 0.4~4.8A	±6.5%	180mV		

### Triple Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPT-120A	5V, 2.0~12A	±2%	80mV	72%	111W
	12V, 0.4~5.8A	+8%, -6%	120mV		
MPT-120B	-5V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~12A	±2%	80mV	73%	110W
MPT-120C	12V, 0.4~5.3A	±6%	120mV		
	-12V, 0.0~1.0A	±5%	80mV		
MPT-120D	5V, 2.0~11A	±2%	80mV	72%	119W
	15V, 0.4~4.4A	+6%, -7%	150mV		
MPT-200A	-15V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~12A	±2%	80mV	74%	110W
MPT-200B	24V, 0.4~2.6A	+8%, -6%	300mV		
	12V, 0.0~1.0A	±5%	120mV		

MPT-200A	5V, 4.0~24A	±2%	80mV	80%	200W
	12V, 0.8~9.0A	±8%	120mV		
MPT-200B	-5V, 0.0~2.4A	±5%	80mV		
	5V, 4.0~24A	±2%	80mV	80%	196W
MPT-200C	12V, 0.6~7.2A	±8%	120mV		
	-12V, 0.0~2.4A	±5%	80mV		
MPT-200D	5V, 4.0~24A	±2%	80mV	80%	201W
	15V, 0.5~5.6A	±8%	150mV		
MPT-200D	-15V, 0.0~2.4A	±5%	80mV		
	5V, 4.0~24A	±2%	80mV	81%	196W
MPT-200D	24V, 0.3~3.6A	±8%	180mV		
	12V, 0.0~2.4A	±5%	80mV		

### Quad Output

Model No.	Output	Tol.	R&N	Effi.	Max.
MPQ-120B	5V, 2.0~11A	±2%	80mV	71%	111W
	12V, 0.5~5.0A	±6%	120mV		
	-5V, 0.0~1.0A	±5%	80mV		
MPQ-120C	-12V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~11A	±2%	80mV	71%	110W
	15V, 0.5~3.8A	+6%, -7%	150mV		
MPQ-120D	-5V, 0.0~1.0A	±5%	80mV		
	-15V, 0.0~1.0A	±5%	80mV		
	5V, 2.0~11A	±2%	80mV	74%	120W
MPQ-120E	12V, 0.2~1.1A	+8%, -6%	150mV		
	24V, 0.3~2.3A	±8%	300mV		
	-12V, 0.0~1.0A	±5%	80mV		
MPQ-200B	5V, 2.0~11A	±2%	80mV	73%	109W
	12V, 0.5~3.3A	±6%	120mV		
	15V, 0.0~1.0A	±8%	80mV		
MPQ-200C	24V, 0.0~1.0A	±5%	80mV		
	5V, 3.0~18A	±2%	80mV	78%	193W
	12V, 0.7~8.4A	±8%	120mV		
MPQ-200D	-5V, 0.0~2.4A	±5%	80mV		
	-12V, 0.0~2.4A	±5%	80mV		
	5V, 3.0~18A	±2%	80mV	78%	190W
MPQ-200E	15V, 0.5~6.0A	±6%	150mV		
	-5V, 0.0~2.4A	±5%	80mV		
	-15V, 0.0~2.4A	±5%	80mV		
MPQ-200F	5V, 3.0~18A	±2%	80mV	79%	195W
	24V, 0.3~3.6A	±8%	180mV		
	12V, 0.0~2.4A	±5%	80mV		
MPQ-200F	-12V, 0.0~2.4A	±5%	80mV		
	5V, 3.0~18A	±2%	80mV	81%	200W
	24V, 0.3~3.3A	±8%	180mV		
MPQ-200F	15V, 0.0~2.4A	±5%	80mV		
	-15V, 0.0~2.4A	±5%	80mV		