



### KEY FEATURES

- \*Universal input
- \*Built-in EMI filter
- \*Optional remote sense on main output
- \*Optional constant current charger
- \*Optional  $\pm 12\text{VDC}/\pm 24\text{VDC}/\pm 48\text{VDC}$  input
- \*Optional cover
- \*Optional constant current change (for single output)

### APPLICATIONS

- \*Telecommunications/Business machines
- \*Computer peripherals/Medical instruments
- \*Test & industrial equipments

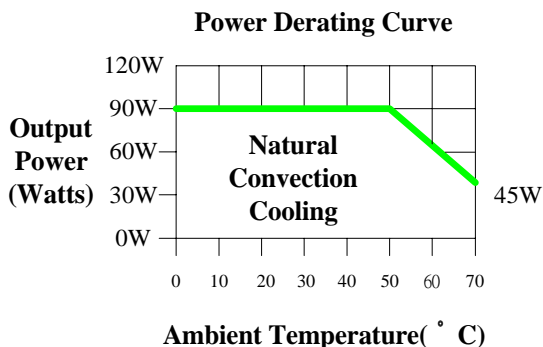
### ELECTRICAL SPECIFICATIONS

#### INPUT

- \*Input range-----90~264 VAC, universal
- \*Frequency-----47~63Hz
- \*Inrush current-----38A typical, Cold start @25°C, 115VAC
- \*Efficiency-----65%~85% typical at full load
- \*EMI filter-----FCC Class B conducted, CISPR 22 Class B conducted, EN55022 class B Conducted
- \*Line regulation----- +/- 0.5% typical

#### OUTPUT

- \*Maximum power----90W convection (Refer next page)
- \*Hold-up time -----10ms typical at full load and 115 VAC nominal line
- \*Overload protection-Short circuit protection
- \*Overvoltage protection -----Main output 20% to 40% above nominal output
- \*Ripple/Noise ----- +/- 1% Max. @full load (Optional +/-0.5 % per inquiry)



### EMI & EMC

- \*FCC part 15, Class B
- \*CISPR 22 / EN55022, Class B
- \*VCCI, Class 2
- \*CE, EN61000-3-2 (Class A) and -3 ; EN61000-4-2, -3 , -4 , -5 , -6 and -11

### SAFETY APPROVAL

- \*UL1950 / c UL
- \*Optional CSA 22.2, LEVEL 3 (COMPLY WITH)
- \*TUV EN60950
- \*Optional UL 2601(EMI Class A)(COMPLY WITH)

### ENVIRONMENTAL

- \*Operating temperature :  
0 to 50°C ambient; derate each output at 2.5% per degree from 50°C to 70°C
- \*Humidity:  
Operating; non-condensing, 5% to 95%
- \*Vibration :  
10~55 Hz at 1G 3 minutes period, 30 minutes along X, Y and Z axis
- \*Storage temperature:  
-40 to 85°C
- \*Temperature coefficient:  
+/- 0.05% per degree C
- \*MTBF demonstrated:  
>100,000 hours at full load and 25°C ambient conditions

# TPS100 SWITCHING MODE 90W U CHANNEL POWER SUPPLIES

MODEL	OUTPUT VOLTAGE	ADJUSTMENT RANGE	MAXIMUM OUTPUT CURRENT	PEAK OUTPUT CURRENT(NOTE1)	MINIMUM OUTPUT CURRENT	TOTAL REGULATION(NOTE3)	RIPPLE & NOISE %P-P(NOTE2)	PEAK OUTPUT POWER(NOTE1)
<b>TPS100-10</b>	+5V	±10% Typical	18A	29.7A	0A	±3%	±1%	150W Typical
<b>TPS100-11</b>	+12V	±10% Typical	7.5A	12.4A	0A	±3%	±1%	150W Typical
<b>TPS100-12</b>	+15V	±10% Typical	6A	9.9A	0A	±3%	±1%	150W Typical
<b>TPS100-13</b>	+24V	±10% Typical	3.75A	6.2A	0A	±3%	±1%	150W Typical
<b>TPS100-14</b>	+48V	±10% Typical	1.875A	3.1A	0A	±3%	±1%	150W Typical
<b>TPS100-15</b>	+13.5V	±10% Typical	6.66A	10.9A	0A	±3%	±1%	150W Typical
<b>TPS100-16</b>	+56V	±10% Typical	1.6A	2.6A	0A	±3%	±1%	150W Typical
<b>TPS100-17</b>	+18V	±10% Typical	5A	2.6A	0A	±3%	±1%	150W Typical
<b>TPS100-18</b>	+3.3V	±10% Typical	25A	41.3A	0A	±5%	±1.5%	150W Typical

## SINGLE OUTPUT MODEL SELECTION CHART

<b>TPS100-20</b>	+5 V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+12V	Fixed	4.2A	6.9A	0.42A	±5%	±1%	
<b>TPS100-21</b>	+5 V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+24V	Fixed	2.2A	3.6A	0.22A	±5%	±1%	
<b>TPS100-22</b>	+5 V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	- 5 V	Fixed	10A	16.5A	1A	±5%	±1%	
<b>TPS100-23</b>	+12V	±10% Typical	4.2A	6.9A	0.42A	±5%	±1%	150W Typical
	- 12 V	Fixed	4.2A	6.9A	0.42A	±5%	±1%	
<b>TPS100-24</b>	+15 V	±10% Typical	3.4A	5.6A	0.34A	±5%	±1%	150W Typical
	- 15 V	Fixed	3.4A	5.6A	0.34A	±5%	±1%	
<b>TPS100-25</b>	+3.3V	±10% Typical	17A	28A	1.7A	±5%	±1.5%	150W Typical
	+12 V	Fixed	1A	1.6A	0.1A	±5%	±1%	
<b>TPS100-26</b>	+ 5 V	±10% Typical	1A	1.6A	0.1A	±5%	±1%	150W Typical
	+48V	Fixed	2A	3.3A	0.2A	±5%	±1%	

## TRIPLE OUTPUT MODEL SELECTION CHART

<b>TPS100-30</b>	+ 5V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+12V	Fixed	4A	6.6A	0.4A	±5%	±1%	
	- 5 V	Fixed	0.6A	1A	0.06A	±10%	±1%	
<b>TPS100-31</b>	+ 5V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+12V	Fixed	4A	6.6A	0.4A	±5%	±1%	
	-12V	Fixed	0.6A	1A	0.06A	±10%	±1%	
<b>TPS100-32</b>	+ 5V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+15V	Fixed	2.8A	4.6A	0.28A	±5%	±1%	
	-15V	Fixed	0.6A	1A	0.06A	±10%	±1%	
<b>TPS100-33</b>	+ 5V	±10% Typical	14A	23.1A	1.4A	±5%	±1%	150W Typical
	+15V	Fixed	2A	3.3A	0.2A	±5%	±1%	
	- 5 V	Fixed	0.5A	0.8A	0.05A	±10%	±1%	
<b>TPS100-34</b>	+ 5V	±10% Typical	13A	21.5A	1.3A	±5%	±1%	150W Typical
	+15V	Fixed	2A	3.3A	0.2A	±5%	±1%	
	-12V	Fixed	0.6A	1A	0.06A	±10%	±1%	
<b>TPS100-35</b>	+ 5 V	±10% Typical	9A	14.9A	0.9A	±5%	±1%	150W Typical
	+24V	Fixed	2A	3.3A	0.2A	±5%	±1%	
	-12V	Fixed	0.6A	1A	0.06A	±10%	±1%	
<b>TPS100-36</b>	+ 5V	±10% Typical	9A	14.9A	0.9A	±5%	±1%	150W Typical
	+12V	Fixed	3.5A	5.8A	0.35A	±5%	±1%	
	- 12V	Fixed	0.6A	1A	0.06A	±10%	±1%	
<b>TPS100-37</b>	+ 5V	±10% Typical	9A	14.9A	0.9A	±5%	±1%	150W Typical
	+12V	Fixed	3.5A	5.8A	0.35A	±5%	±1%	
	+24V	Fixed	0.6A	1A	0.06A	±10%	±1%	
<b>TPS100-38</b>	+ 5V	±10% Typical	6A	9.9A	0.6A	±5%	±1%	150W Typical
	+12V	Fixed	2A	3.3A	0.2A	±5%	±1%	
	+48V	Fixed	1A	1.6A	0.1A	±10%	±1%	

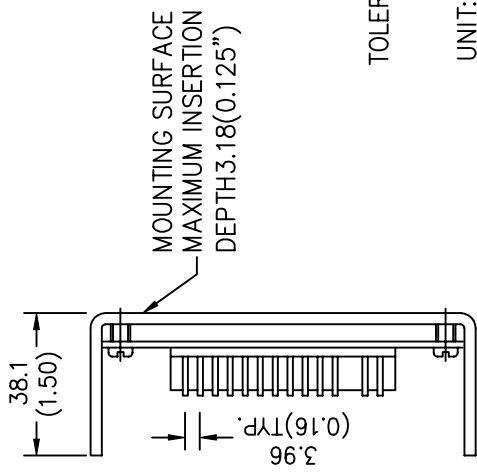
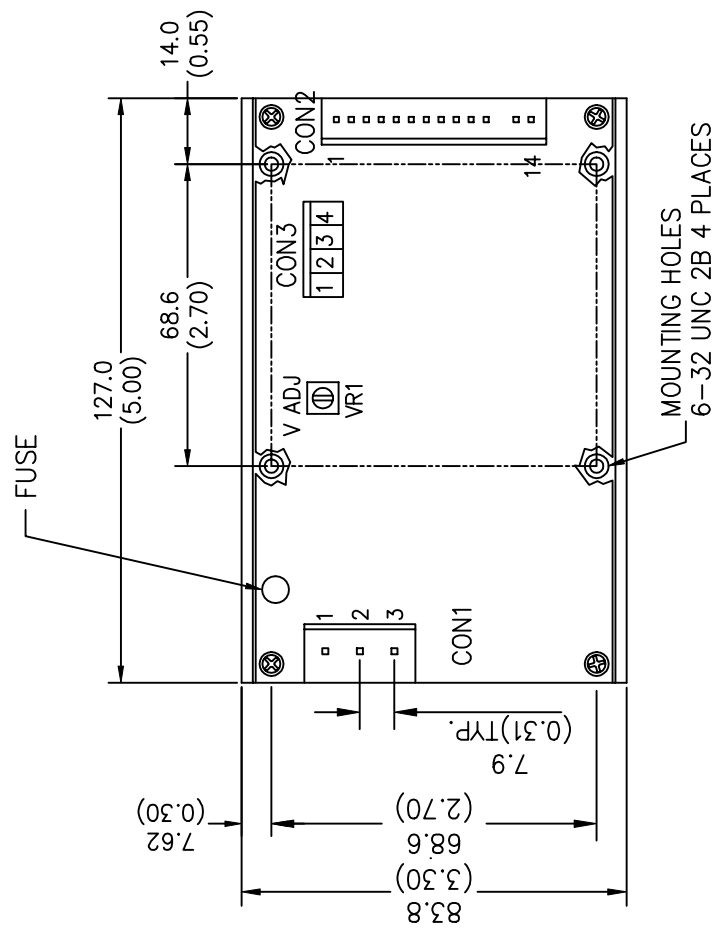
**TPS100 SWITCHING MODE 90W U CHANNEL POWER SUPPLIES**

MODEL	OUTPUT VOLTAGE	ADJUSTMENT RANGE	MAXIMUM OUTPUT CURRENT	PEAK OUTPUT CURRENT(NOTE1)	MINIMUM OUTPUT CURRENT	TOTAL REGULATION(NOTE3)	RIPPLE & NOISE %P-P(NOTE2)	PEAK OUTPUT POWER(NOTE1)
<b>QUAD OUTPUT MODEL SELECTION CHART</b>								
TPS100-40	+ 5V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+12V	Fixed	3.5A	5.8A	0.35A	±5%	±1%	
	- 12V	Fixed	0.5A	0.8A	0.05A	±10%	±1%	
	- 5 V	Fixed	0.5A	0.8A	0.05A	±10%	±1%	
TPS100-41	+ 5V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+12V	Fixed	3A	5A	0.3A	±5%	±1%	
	- 12V	Fixed	1A	1.6A	0.1A	±10%	±1%	
	- 5 V	Fixed	1A	1.6A	0.1A	±10%	±1%	
TPS100-42	+ 5V	±10% Typical	10A	16.5A	1A	±5%	±1%	150W Typical
	+12V	Fixed	2A	3.3A	0.2A	±5%	±1%	
	- 15V	Fixed	1A	1.6A	0.1A	±10%	±1%	
	+15V	Fixed	1A	1.6A	0.1A	±10%	±1%	
TPS100-43	+ 5V	±10% Typical	6A	9.9A	0.6A	±5%	±1%	150W Typical
	+12V	Fixed	2.5A	4.1A	0.25A	±5%	±1%	
	-15V	Fixed	1A	1.6A	0.1A	±10%	±1%	
	- 12V	Fixed	1A	1.6A	0.1A	±10%	±1%	
TPS100-44	+ 5V	±10% Typical	6A	9.9A	0.6A	±5%	±1%	150W Typical
	+12V	Fixed	1A	1.6A	0.1A	±5%	±1%	
	- 12V	Fixed	1A	1.6A	0.1A	±10%	±1%	
	+48V	Fixed	1A	1.6A	0.1A	±10%	±1%	
TPS100-45	+ 5V	±10% Typical	6A	9.9A	0.6A	±5%	±1%	150W Typical
	+12V	Fixed	2A	3.3A	0.2A	±5%	±1%	
	- 12V	Fixed	1A	1.6A	0.1A	±10%	±1%	
	+24V	Fixed	1.5A	2.5A	0.15A	±10%	±1%	
TPS100-46	+ 5V	±10% Typical	2.5A	4.1A	0.25A	±5%	±1%	150W Typical
	+12V	Fixed	1A	1.6A	0.1A	±5%	±1%	
	- 12V	Fixed	2A	3.3A	0.2A	±10%	±1%	
	+36V	Fixed	1.5A	2.5A	0.15A	±10%	±1%	

- NOTES:** 1) Peak loads for lasting <30 seconds with a maximum 10% duty cycle are acceptable. Please contact us if need special peak load.  
 2) Maximum peak to peak noise expressed as a percentage of output voltage, 20MHz bandwidth, 0.1 μF and 47 μF Cap. on outputs.  
 3) Loading test conditions are set for all outputs at minimum, middle and maximum of loads. Special cross loading requirement is welcomed.  
 4) Detailed engineering specification of each model is available for inquiry.  
 5) Special output voltage/current inquiry is welcomed.  
 6) Specifications subject to change without notice.  
 7) 25% derated if 24 VDC input version; 50% derated if 12 VDC input version; 25% derated if additional cover.

CON1=CONNECTOR,MOLEX#09-65-2058(OR EQUIVALENT)  
 (MATING CONNECT.=MOLEX#09-50-3051)  
 CON2=CONNECTOR,MOLEX#09-65-2148(OR EQUIVALENT)  
 (MATING CONNECT.=MOLEX#09-50-3141)  
 ALL MATING TERMINAL=MOLEX#08-50-0106(OR EQUIVALENT)

CON3=CONNECTOR,MOLEX#22-27-2041(OR EQUIVALENT)  
 (MATING CONNECT.=MOLEX#22-01-3047)  
 MATING TERMINAL=MOLEX#08-50-0113(OR EQUIVALENT)



TOLERANCE :  $\frac{\text{mm} \pm 0.5}{(\text{inch}) \pm 0.02}$

UNIT:  $\frac{\text{mm}}{(\text{inch})}$

CON1 (CONNECTORS) CONFIGURATION

1	2	3
FG	NEUT(-)	LINE(+)

CON2 (CONNECTORS) CONFIGURATION FOR V4 ISOLATED

Multiple Output	1-3	4-7	8-10	11	12	13	14
	V1	RET	V2	N/A	V3	KEY	V4RET V4

CON2 (CONNECTORS) CONFIGURATION FOR V4 POSITIVE

Multiple Output	1-3	4-7	8-10	11	12	13	14
	V1	RET	V2	N/A	V3	KEY	RET V4(+)

CON2 (CONNECTORS) CONFIGURATION FOR V4 NEGATIVE

Multiple Output	1-3	4-7	8-10	11	12	13	14
	V1	RET	V2	N/A	V3	KEY	V4(-)RET

CON2 (CONNECTORS) CONFIGURATION FOR V2 ISOLATED

Dual Output	1-3	4-7	8-9	10-14
	V1	RET	V2	NC

CON2 (CONNECTORS) CONFIGURATION

Single Output	1-5	6-10	11-14
	V1(+)	RET(-)	NC

CON3 CONFIGURATION

1	2	3	4
S-	S+	RET	PG