

TOTAL POWER INT'L

TPS35A SWITCHING MODE 35 WATT ADAPTERS

KEY FEATURES

- *Universal input
- *Built-in EMI filter
- *Optional constant current charger
- *Optional $\pm 12\text{VDC}/\pm 24\text{VDC}/\pm 48\text{VDC}$ input
- *Optional output cable and plug
- *Optional constant current change (for single output)

APPLICATIONS

- *Telecommunications
- *Computer peripherals/Set-Top Box
- *Test & industrial equipments
- *Medical instruments
- *Business machines



ELECTRICAL SPECIFICATIONS

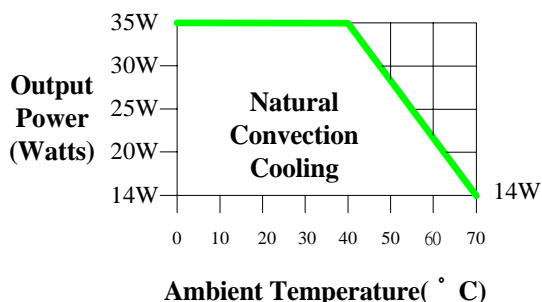
INPUT

- *Input range-----90~264 VAC, universal
- *Frequency-----47~63Hz
- *Inrush current-----30A typical, Cold start @25°C, 115VAC
- *Efficiency-----65% ~80% 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----25W (Multi) /35W (Single)
(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)

Power Derating Curve



EMI & EMC

- *FCC part 15, Class B
- *CISPR 22 / EN55022, Class B
- *VCCI, Class 2
- *CE, EN 61000-3-2 (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 40°C ambient; derate each output at 2% per
degree from 40°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

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)
SINGLE OUTPUT MODEL SELECTION CHART								
TPS35A-10	+5V	Fixed	6A	8A	0A	±5%	±1%	40W Typical
TPS35A-11	+12V	Fixed	2.94A	3.3A	0A	±5%	±1%	40W Typical
TPS35A-12	+15V	Fixed	2.33A	2.6A	0A	±5%	±1%	40W Typical
TPS35A-13	+24V	Fixed	1.45A	1.6A	0A	±5%	±1%	40W Typical
TPS35A-14	+48V	Fixed	0.73A	0.8A	0A	±5%	±1%	40W Typical
TPS35A-15	+36V	Fixed	0.98A	1.1A	0A	±5%	±1%	40W Typical
TPS35A-17	+9V	Fixed	3.85A	4.4A	0A	±5%	±1%	40W Typical
TPS35A-18	+3.3V	Fixed	6A	10A	0A	±5%	±1.5%	35W Typical

DUAL OUTPUT MODEL SELECTION CHART								
TPS35A-20Y	+5 V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+12V	Fixed	1A	1.3A	0.1A	±5%	±1%	
TPS35A-21Y	+5 V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+15V	Fixed	0.8A	1.1A	0.08A	±5%	±1%	
TPS35A-22Y	+5 V	Fixed	5A	6.5A	0.5A	±5%	±1%	40W Typical
	- 5V	Fixed	1A	1.3A	0.1A	±10%	±1%	
TPS35A-23Y	+12V	Fixed	1.2A	1.5A	0.12A	±5%	±1%	40W Typical
	- 12V	Fixed	1.2A	1.5A	0.12A	±10%	±1%	
TPS35A-24Y	+15V	Fixed	1A	1.3A	0.1A	±5%	±1%	40W Typical
	- 15V	Fixed	1A	1.3A	0.1A	±10%	±1%	
TPS35A-25Y	+5V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+24V	Fixed	0.5A	0.65A	0.05A	±5%	±1%	
TPS35A-26Y	+3.3V	Fixed	4.5A	5.85A	0.45A	±5%	±1.5%	35W Typical
	+12V	Fixed	1A	1.3A	0.1A	±5%	±1%	
TPS35A-27Y	+3.3 V	Fixed	4.5A	5.85A	0.45A	±5%	±1.5%	35W Typical
	+24V	Fixed	0.5A	0.65A	0.05A	±5%	±1%	
TPS35A-28Y	+3.3 V	Fixed	4.5A	5.85A	0.45A	±5%	±1.5%	35W Typical
	+5V	Fixed	2.4A	3.12A	0.24A	±5%	±1%	

TRIPLE OUTPUT MODEL SELECTION CHART								
TPS35A-30Y	+ 5V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+12V	Fixed	0.83A	1.08A	0.08A	±5%	±1%	
	- 5 V	Fixed	0.4A	0.52A	0.04A	±10%	±1%	
TPS35A-31Y	+ 5V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+12V	Fixed	0.5A	0.65A	0.05A	±5%	±1%	
	-12V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
TPS35A-32Y	+ 5V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+15V	Fixed	0.4A	0.52A	0.04A	±5%	±1%	
	-15V	Fixed	0.4A	0.52A	0.04A	±10%	±1%	
TPS35A-33Y	+ 5V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+15V	Fixed	0.6A	0.78A	0.06A	±5%	±1%	
	- 5 V	Fixed	0.6A	0.78A	0.06A	±10%	±1%	
TPS35A-34Y	+ 5V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+15V	Fixed	0.4A	0.52A	0.04A	±5%	±1%	
	-12V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
TPS35A-35Y	+ 5 V	Fixed	3.6A	4.7A	0.36A	±5%	±1%	40W Typical
	+24V	Fixed	0.25A	0.33A	0.02A	±5%	±1%	
	-12V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
TPS35A-36Y	+ 5V	Fixed	2A	2.6A	0.2A	±5%	±1%	40W Typical
	+12V	Fixed	1.17A	1.52A	0.12A	±5%	±1%	
	- 12V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
TPS35A-37Y	+ 5V	Fixed	2A	2.6A	0.2A	±5%	±1%	40W Typical
	+12V	Fixed	1.17A	1.52A	0.12A	±5%	±1%	
	+24 V	Fixed	0.25A	0.33A	0.02A	±10%	±1%	

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)
TRIPLE OUTPUT MODEL SELECT ON CHART								
PPS35A-39Y	+3.3V	Fixed	3A	3.9A	0.3A	±5%	±1.5%	35W Typical
	+ 5V	Fixed	2.8A	3.9A	0.28A	±5%	±1%	
	+12V	Fixed	0.5A	0.65A	0.05A	±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 μ F and 47 μ F 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.
 8) Above data is measured at the output plug/connector of 1M long cable. Please contact us if need special cable and connector.
 9) For single 3.3V output, the output is 19.8W maximum; For single 5V output, the output is 30W maximum.
 For multiple outputs with 3.3V as V1, the output is 27W maximum; For multiple outputs with 5V as V1, the output 30W maximum.