



- Universal AC input
- Low leakage current $\leq 0.5\text{mA}$
- Protections: Short circuit / Overload / Over voltage
- Fixed switching frequency at 65KHz
- Cooling by free air convection



Model Number	Output Volts	Output Amps	Ripple & Noise	Line Reg	Load Reg	Efficiency	Volt Tolerance	Min Load
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TRIPLE OUTPUT

PT-65A	5 Volts(DC)	5.5 Amps	50mVpk-pk	$\pm 1.0\%$	$\pm 3.0\%$	76%	$\pm 4.0\%$	0.4~7Amps
	12 Volts(DC)	2.5 Amps	120mVpk-pk	$\pm 2.0\%$	$\pm 4.0\%$	76%	$\pm 7.0\%$	0.2~3.2Amps
	-5 Volts(DC)	0.5 Amps	50mVpk-pk	$\pm 1.0\%$	$\pm 1.0\%$	76%	$\pm 5.0\%$	0~0.7Amps
PT-65B	5 Volts(DC)	5.5 Amps	50mVpk-pk	$\pm 1.0\%$	$\pm 3.0\%$	77%	$\pm 4.0\%$	0.4~7Amps
	12 Volts(DC)	2.5 Amps	120mVpk-pk	$\pm 2.0\%$	$\pm 4.0\%$	77%	$\pm 7.0\%$	0.2~3.2Amps
	-12 Volts(DC)	0.5 Amps	100mVpk-pk	$\pm 1.0\%$	$\pm 1.0\%$	77%	$\pm 5.0\%$	0~0.7Amps
PT-65C	5 Volts(DC)	5.5Amps	50mVpk-pk	$\pm 1.0\%$	$\pm 3.0\%$	77%	$\pm 4.0\%$	0.4~7Amps
	15 Volts(DC)	2.0 Amps	120mVpk-pk	$\pm 2.0\%$	$\pm 4.0\%$	77%	$\pm 7.0\%$	0.2~2.6Amps
	-15 Volts(DC)	0.5 Amps	100mVpk-pk	$\pm 1.0\%$	$\pm 1.0\%$	77%	$\pm 5.0\%$	0~0.7Amps
PT-65D	5 Volts(DC)	4.0 Amps	50mVpk-pk	$\pm 1.0\%$	$\pm 2.0\%$	79%	$\pm 4.0\%$	0.5~5Amps
	12 Volts(DC)	2.0 Amps	120mVpk-pk	$\pm 2.0\%$	$\pm 5.0\%$	79%	$\pm 6.0\%$	0.2~4.0Amps
	24 Volts(DC)	1.0 Amps	200mVpk-pk	$\pm 3.0\%$	$\pm 5.0\%$	79%	$\pm 6.0\%$	0.2~1.3Amps
PT-6503	3.3 Volts(DC)	6.0 Amps	50mVpk-pk	$\pm 1.0\%$	$\pm 3.0\%$	72%	$\pm 3.0\%$	0~7.0Amps
	5 Volts(DC)	6.0 Amps	50mVpk-pk	$\pm 1.0\%$	$\pm 3.0\%$	72%	+4,-2.0%	0.2~10Amps
	12 Volts(DC)	1.0 Amps	100mVpk-pk	$\pm 2.0\%$	$\pm 8.0\%$	72%	$\pm 8.0\%$	0~1.2Amps

INPUT SPECIFICATIONS

Input Voltage Range	90-264VAC / 127-370 Volts(DC)
Frequency Range	47-440 Hz: PT-65A/B/C/D 47-63Hz: PT6503
Inrush Current, typ: (cold start)	20 Amps @ 115VAC 40Amps @ 230VAC
Input Current	
PT-65A/B/C/D	1.5Amps max @115VAC
PT-6503	1.8Amps max @115VAC
PT-65A/B/C/D/03	0.7 Amps max @ 230VAC
Leakage current	
PT-65A/B/C/D	< 0.5mAmps
PT-6503	< 1mAmps /240VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	See Selection Chart
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	See Selection Chart
Ripple/Noise (Note 1)	See Selection Chart
Hold Up Time @ FL	60mS
Setup, Rise Time @ FL	800mS, 20mS PT-65A/B/C/D 800mS, 50mS PT-6503
Over Voltage Protection	5Volts(DC) only: 5.75~6.75Volts(DC) Hiccup mode, auto recover
Over Current Protection	Hiccup mode, auto recover
PT-65A/B/C	73~95W rated output power
PT-65D	74.8~98.6W rated output power
PT-6503	120-160% rated output power
DC Voltage Adjust	4.75~5.5Volts(DC):PT-65A/B/C/D(5V) 3~3.6Volts(DC): PT-6503(3.3Volts)

GENERAL SPECIFICATIONS

Safety	UL60950-1 (PT-65A/B/C/D) UL1950 (only PT-65003) TUV EN60950-1 Approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)
EMI	Compliance to EN55022 (CISPR22) Class B

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

Harmonic Current	Compliance to EN61000-3-2,-3
Efficiency	See Selection Chart
Isolation	3000VAC Input - Output 1500VAC Input - Ground 500VAC Output - Ground 1min
EMS	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024 light industry level, criteria A

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10°C to +60°C (See Derate Curve)
Storage Temperature	-20°C to +85°C, 10~95% RH
Relative Humidity	20 to +90% RH
Temperature Coefficient	
PT-65A/B/C/D	±0.04% / °C (0-50°C) on +5Volts output
PT-6503	±0.03% / °C (0-50°C)
MTBF	
PT-65A/B/C/D	277.2K Hrs min, MIL-HDBK-217F (25°C)
PT-6503	222K Hrs min, MIL-HDBK-217F (25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	
Millimeters	127 x 76.2 x 42
Inches	5" x 3" x 1.6"
Weight	
PT-65A/B/C/D	8.82 oz (250g)
PT-6503	9.87 oz (280g)

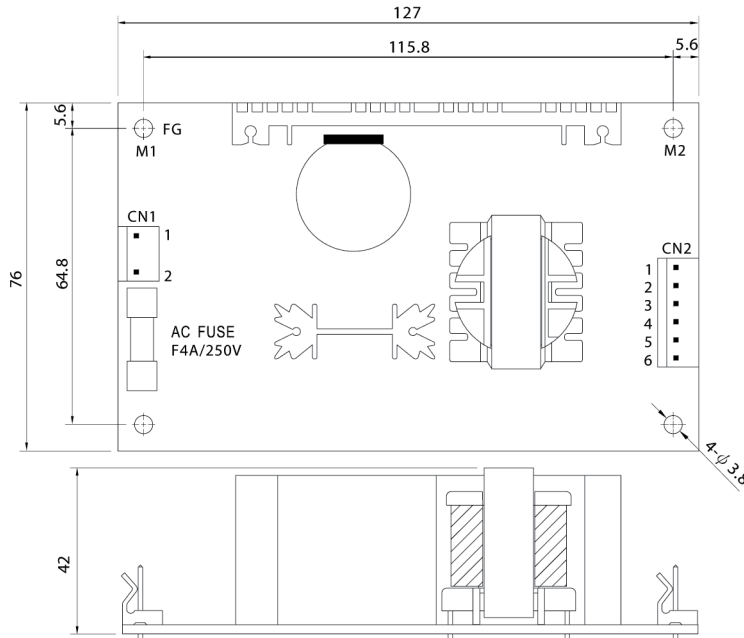
NOTE

1. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor.
2. Tolerance: includes set up tolerance, line regulation and load regulation.
3. Mounting holes M1 and M2 should be grounded for EMI purposes.

PT-65A,B,C,D MECHANICAL SPECIFICATION AND BLOCK DIAGRAM

Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5277-02 or equivalent

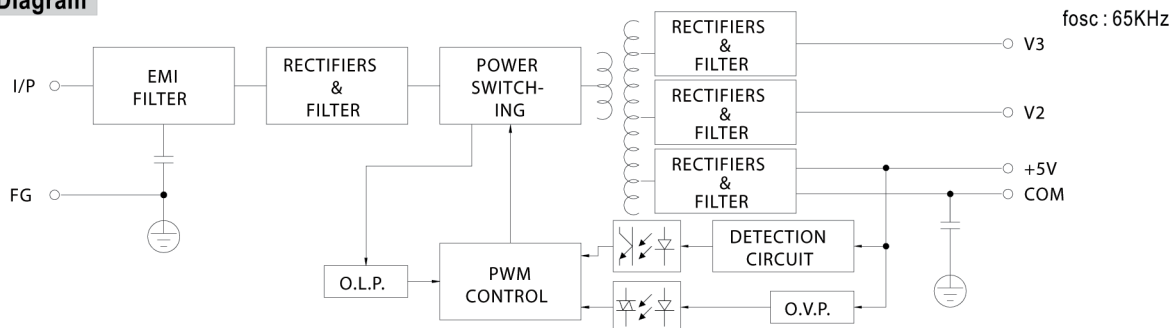
Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	Molex 5195 or equivalent	Molex 5194 or equivalent
2	AC/L		

DC Output Connector (CN2) : Molex 5273-06 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	V2	Molex 5195 or equivalent	Molex 5194 or equivalent
2,3	+5V		
4,5	COM		
6	V3		

※PIN2:+5V PIN3,4,5:COM only for PT-65D

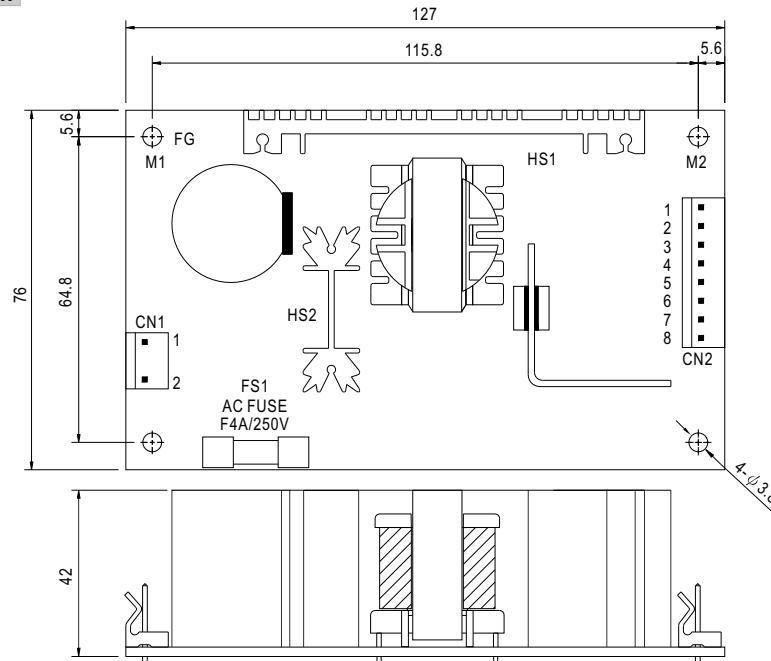
Block Diagram



PT-6503 MECHANICAL SPECIFICATION AND BLOCK DIAGRAM

Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5277-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	Molex 5195 or equivalent	Molex 5194 or equivalent
2	AC/L		

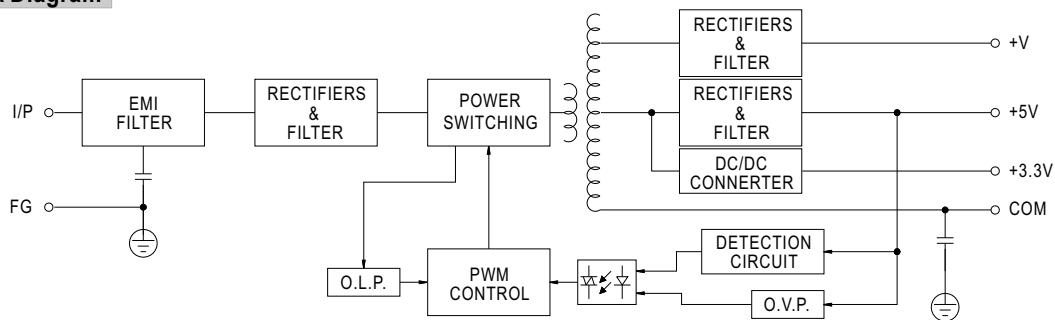
⚠ HS1,HS2 can not be shorted

DC Output Connector (CN2) : Molex 5273-08 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	+5V	Molex 5195 or equivalent	Molex 5194 or equivalent
3,4,5	COM		
6	+V		
7,8	+3.3V		

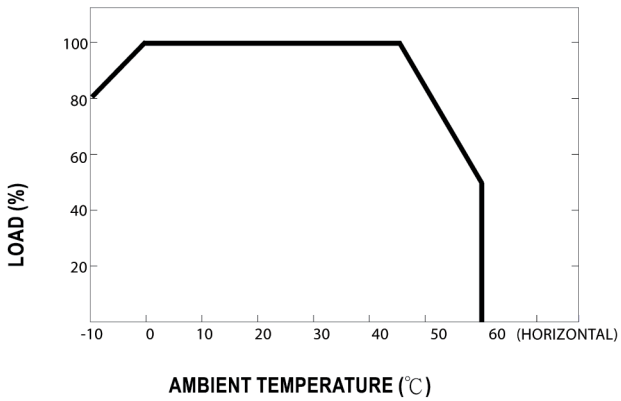
Block Diagram

fosc : 65KHz

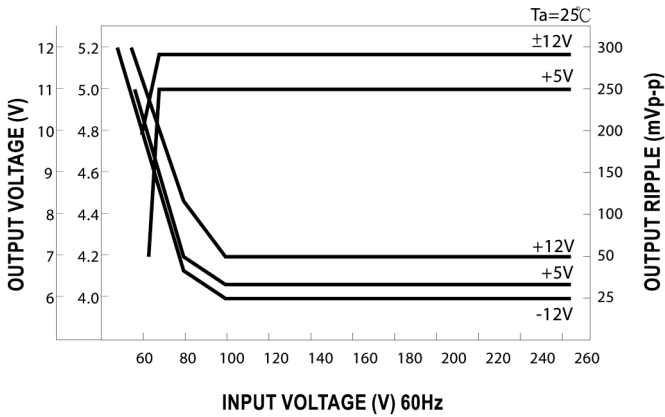


PT-65A,B,C,D CURVES

■ Derating Curve

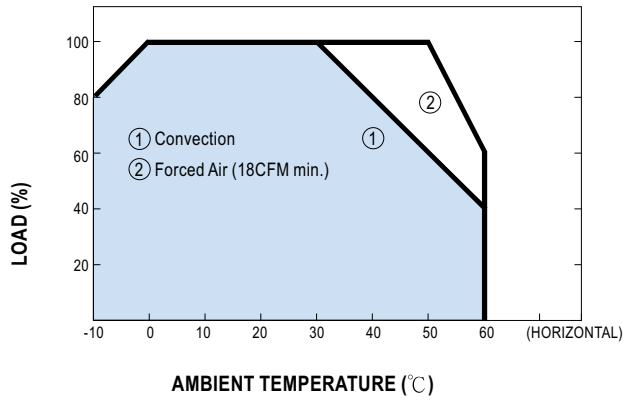


■ Static Characteristics (B)



PT-6503 CURVES

■ **Derating Curve**



■ **Static Characteristics**

