

**SPECIFICATION** 



#### Features:

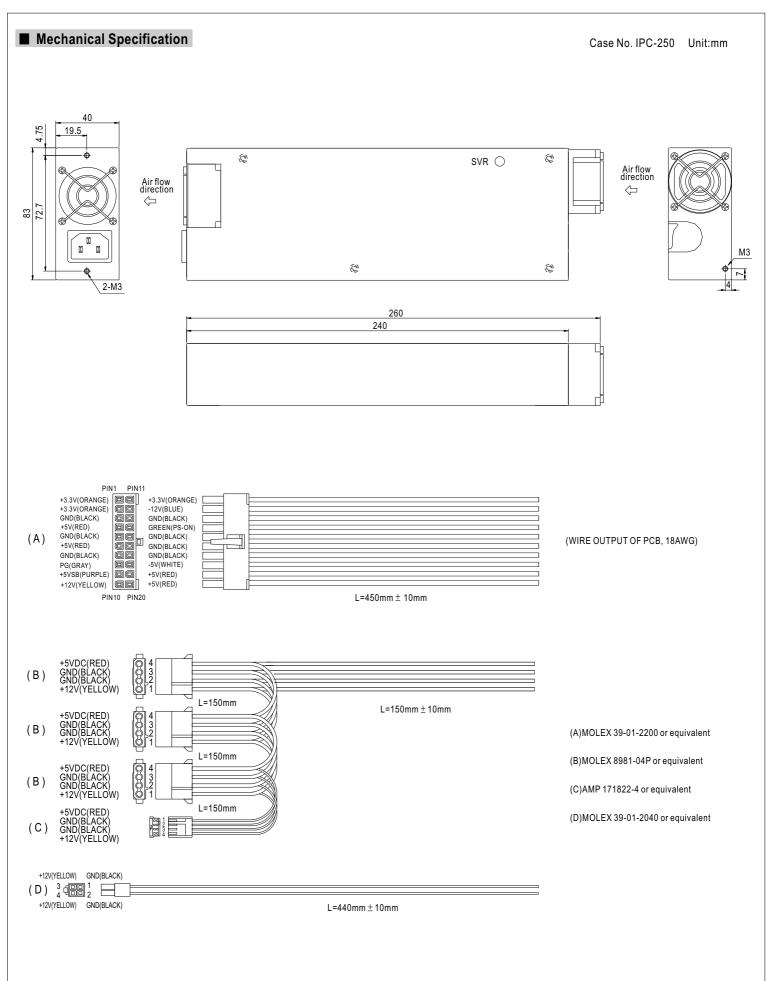
- Meet 1U rack mount system
- Universal AC input / Full range
- Active power factor ≥94%
- Protections:Short circuit/Over load/Over voltage
- Forced air cooling by built-in DC fan
- · With power good and fail signal output
- · Built-in remote ON-OFF control
- Remote DC sense +5V and +3.3V
- With +5VSB:0 ~ 2.0A max.
- 100% full load burn-in test
- High efficiency
- 2 years warranty



MODEL		IPC-300A									
	OUTPUT NUMBER	CH1	CH2	CH3	CH4	CH5	STANDBY				
	DC VOLTAGE	3.3V	5V	12V	-5V	-12V	5VSB				
	RATED CURRENT	20A	30A	18A	0.5A	1A	2A				
	CURRENT RANGE	0 ~ 20A	1 ~ 30A	1 ~ 18A	0 ~ 0.5A	0.1 ~ 1A	0 ~ 2A				
	RATED POWER	300W continue. +5V,+3.3V,+12V combine total power output shall not exceed 270W.(The +5 & +3.3Volt combine total output shall not exceed 15									
		(The -5 & -12Volt combine total output shall not exceed 12W)									
ОИТРИТ	RIPPLE & NOISE (max.) Note.2	,	50mVp-p	120mVp-p	100mVp-p	120mVp-p	50mVp-p				
	VOLTAGE ADJ. RANGE	CH1:3.14 ~ 3.5V	oom v p p	12011179 9	100mvp p	1201117 P	comvp p				
	VOLTAGE TOLERANCE Note.3		±5.0%	±7.0%	±8.0%	±10%	±5.0%				
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±2.0%	±2.0%	±1.0%				
	LOAD REGULATION	±5.0%	±5.0%	±7.0%	±8.0%	±10%	±5.0%				
						1070	15.0 %				
	SETUP, RISE TIME	800ms, 20ms/230VAC 2500ms, 20ms/115VAC at full load									
	HOLD TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load									
	VOLTAGE RANGE	90 ~ 264VAC									
	FREQUENCY RANGE	47 ~ 63Hz									
INPUT	EFFICIENCY (Typ.)	75%									
	AC CURRENT (Typ.)		.3A/230VAC								
	INRUSH CURRENT (Typ.)	40A/115VAC 80A/230VAC									
	LEAKAGE CURRENT(max.)	3mA/240VAC									
	OVER LOAD	105 ~ 150% rated output power									
PROTECTION		Protection type: Shut down o/p voltage, re-power on to recover									
	OVER VOLTAGE	+3.3V, +5V: 110% ~ 140% of rated voltage; +12V:13.2V ~ 16V									
	OVER VOLINGE	Protection type: Shut down o/p voltage, re-power on to recover									
	SHORT CIRCUIT	All output equipped with short circuit									
	SHOKT CIKCOTT	Protection type: Shut down o/p voltage, re-power on to recover									
FUNCTION	POWER GOOD SIGNAL	The TTL compatible signal out with 100ms to 500ms delay after power set up									
	POWER FAIL SIGNAL	The TTL compatible signal will go down at least 1ms before +5V below 4.75V									
	PS-ON INPUT SIGNAL	Power off: PS-ON = "Hi" or ">2V"; Power on: PS-ON = "Low" or "<0.5V"									
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.05% / °C (0 ~ 50°C)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes									
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved									
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC									
SAFETY &	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:50M Ohms/500VDC									
EMC (Note 4)	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B, Design refer to FCC part 15 Class B									
	HARMONIC CURRENT	Compliance to EN	61000-3-2,-3	•	·						
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4, 5,6,8,11, Light industry level, criteria A									
OTHERS	MTBF		MIL-HDBK-217F (2								
		ATX main power connector * 1ea; +12V power connector * 1ea									
	CONNECTOR	Peripheral power connector * 3ea; Floppy drive power connector * 1ea									
	COOLING	Forced air ventilation by 4cm DC fan									
	DIMENSION	260*83*40mm (L*\									
		,	,								
	PACKING	1.46Kg; 10pcs/15.6Kg/0.89CUFT									

- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Load regulation is measured from 20% to 100% max. Load.
- 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets **EMC** directives
- 5. Derating may be needed under low input voltages. Please check the derating curve for more details.

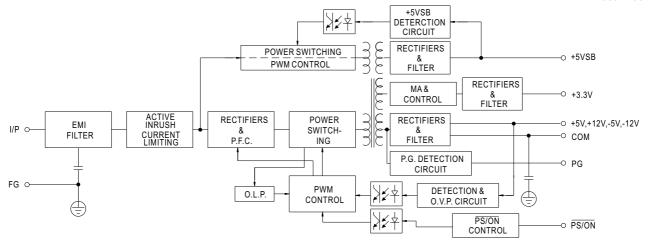






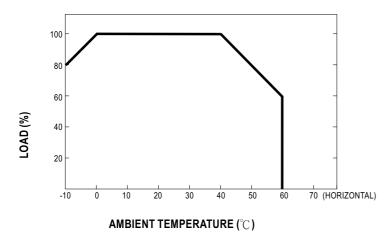
## **■** Block Diagram

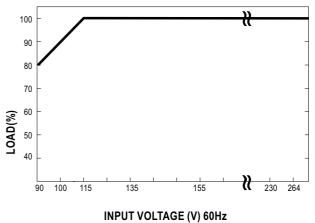
fosc: 100KHz



## ■ Derating Curve

# ■ Output Derating VS Input Voltage







**SPECIFICATION** 



#### Features:

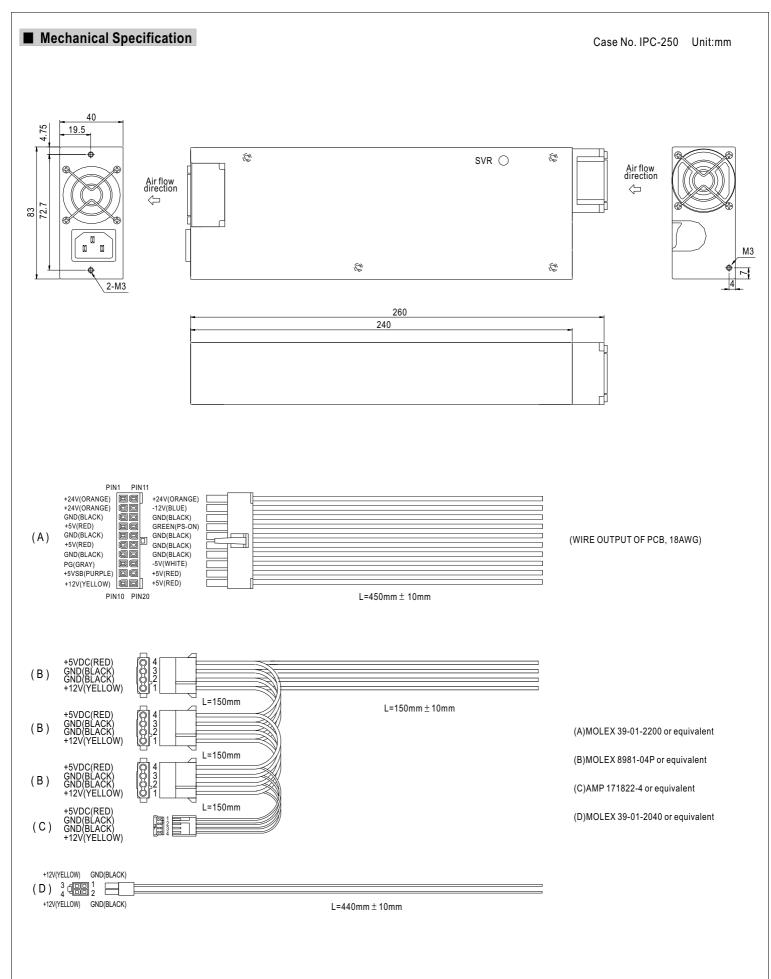
- Meet 1U rack mount system
- Universal AC input / Full range
- Active power factor ≥94%
- · Protections: Short circuit / Overload / Over voltage
- Forced air cooling by built-in DC fan
- With power good and fail signal output
- · Built-in remote ON-OFF control
- Remote DC sense +5V and +24V
- 24V/3A output an peak 7A for 30sec.(max.)
- With +5VSB:0 ~ 2.0A max.
- 100% full load burn-in test
- High efficiency
- · 2 years warranty



MODEL		IPC-300									
	OUTPUT NUMBER	CH1	CH2	CH3	CH4	CH5	STANDBY				
	DC VOLTAGE	24V	5V	12V	-5V	-12V	5VSB				
	RATED CURRENT	3A	30A	18A	0.5A	1A	2A				
	CURRENT RANGE	0 ~ 7A	1 ~ 30A	1 ~ 18A	0 ~ 0.5A	0.1 ~ 1A	0 ~ 2A				
	RATED POWER	300W continue. +24V,+5V,+12V combine total power output shall not exceed 270W.(The +24 & +5Volt combine total output shall not exceed 15									
		(The -5 & -12Volt combine total output shall not exceed 12W)									
OUTPUT	RIPPLE & NOISE (max.) Note.2	240mVp-p	50mVp-p	120mVp-p	100mVp-p	120mVp-p	50mVp-p				
	VOLTAGE ADJ. RANGE	CH1:22.8 ~ 25.2V									
	VOLTAGE TOLERANCE Note.3	±5.0%	±5.0%	±7.0%	±8.0%	±10%	±5.0%				
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±2.0%	±2.0%	±1.0%				
	LOAD REGULATION	±5.0%	±5.0%	±7.0%	±8.0%	±10%	±5.0%				
	SETUP, RISE TIME	800ms, 20ms/230VAC 2500ms, 20ms/115VAC at full load									
	HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load									
	VOLTAGE RANGE	90 ~ 264VAC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	80%									
INPUT	AC CURRENT (Typ.)	4.6A/115VAC 2.3A/230VAC									
	INRUSH CURRENT (Typ.)	40A/115VAC 80A/230VAC									
	LEAKAGE CURRENT(max.)	3mA/240VAC									
	OVERLOAD	105 ~ 150% rated output power									
		Protection type: Shut down o/p voltage, re-power on to recover									
	OVER VOLTAGE	+24V, +5V: 110% ~ 140% of rated voltage; +12V:13.2V ~ 16V									
PROTECTION		Protection type: Shut down o/p voltage, re-power on to recover									
	SHORT CIRCUIT	All output equipped with short circuit									
		Protection type: Shut down o/p voltage, re-power on to recover									
FUNCTION	POWER GOOD SIGNAL										
	POWER GOOD SIGNAL POWER FAIL SIGNAL	The TTL compatible signal out with 100ms to 500ms delay after power set up									
	PS-ON INPUT SIGNAL	The TTL compatible signal will go down at least 1ms before +5V below 4.75V  Power off: PS-ON = "Hi" or ">2V"; Power on: PS-ON = "Low" or "<0.5V"									
					W 01 \0.5V						
	WORKING TEMP. WORKING HUMIDITY	-10 ~ +60°C (Refer to output load derating curve)									
ENVIRONMENT		20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-40~+85°C 10~95% RH									
	TEMP. COEFFICIENT VIBRATION	±0.05% / °C (0 ~ 50°C)									
	SAFETY STANDARDS	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes  UL60950-1, TUV EN60950-1 approved									
SAFETY & EMC (Note 4)	WITHSTAND VOLTAGE	U/P-O/P:1.5KVAC   I/P-FG:1.5KVAC									
	ISOLATION RESISTANCE										
		I/P-O/P, I/P-FG, O/P-FG:50M Ohms/500VDC									
	EMI CONDUCTION & RADIATION										
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3									
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4, 5,6,8,11, light industry level, criteria A  94.1K hrs min. MIL-HDBK-217F (25°C)									
	MTBF										
	CONNECTOR	ATX main power connector * 1ea; +12V power connector * 1ea									
		Peripheral power connector * 3 ea; Floppy drive power connector * 1 ea									
	COOLING	Forced air ventilation by 4cm DC fan									
	DIMENSION	260*83*40mm (L*W	,								
	PACKING	1.46Kg; 10pcs/15.6Kg/0.89CUFT									

- 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
- 5. Derating may be needed under low input voltages. Please check the derating curve for more details.

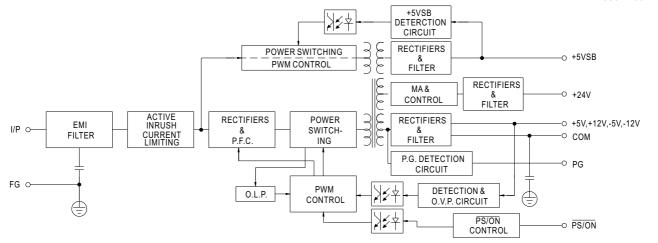






### **■** Block Diagram

fosc: 100KHz



# ■ Derating Curve

# ■ Output Derating VS Input Voltage

