

## 300W Industrial 1U ATX 12V/P4 PC Power Supply

# IPC-300A



Features :

- Meet 1U rack mount system
- Universal AC input / Full range
- Active power factor  $\geq 94\%$
- 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 +3.3V
- With +5VSB:0 ~ 2.0A max.
- 100% full load burn-in test
- High efficiency
- 2 years warranty

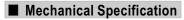


#### SPECIFICATION

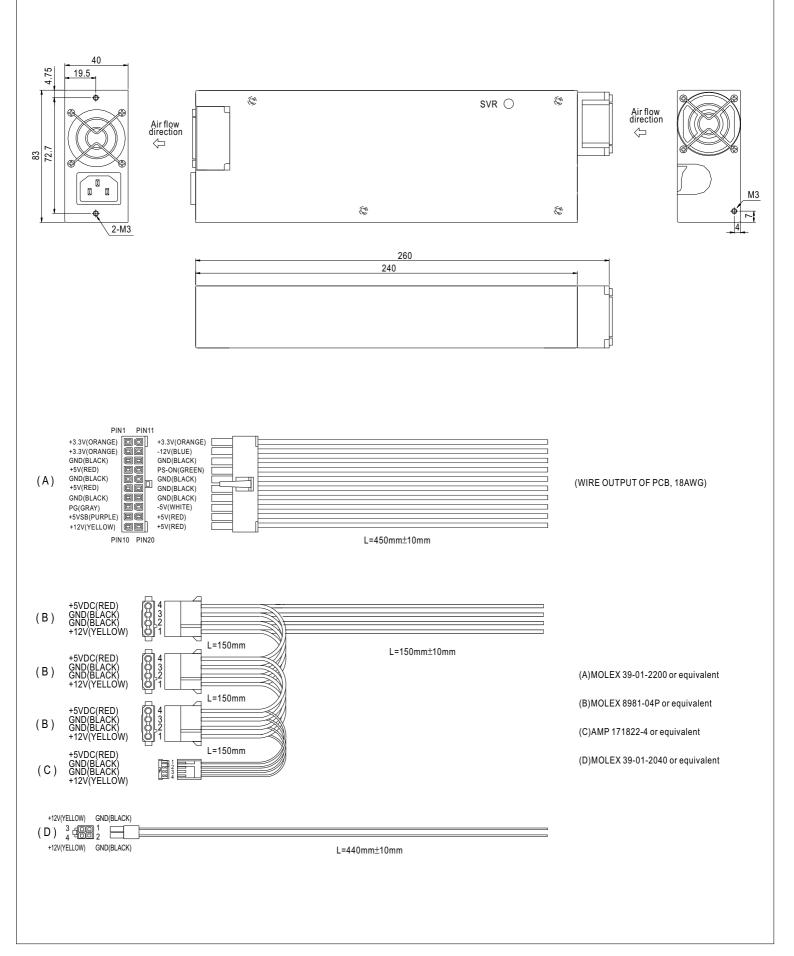
MODEL		IPC-300A									
	OUTPUT NUMBER	CH1	CH2	CH3	CH4	CH5	STANDBY				
OUTPUT	DC VOLTAGE	3.3V	5V	12V	-5V	-12V	5VSB				
	RATED CURRENT	20A	30A	18A	0.5A	1A	2A				
	CURRENT RANGE	0~20A	1~30A	1 ~ 18A	0~0.5A	0.1 ~ 1A	0~2A				
		300W continue. +5V,+3.3V,+12V combine total power output shall not exceed 270W.(The +5 & +3.3Volt combine total output shall not exceed 150W)									
	RATED POWER	(The -5 & -12Volt combine total output shall not exceed 12W)									
	RIPPLE & NOISE (max.) Note.2										
	VOLTAGE ADJ. RANGE	CH2 : 5.05 ~ 5.5V									
	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/230V/	AC 2500ms, 20m	ns/115VAC at full I	oad						
	HOLD TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load									
	VOLTAGE RANGE	90 ~ 264VAC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	75%									
INPUT	AC CURRENT (Typ.)	4.6A/115VAC 2.3A/230VAC									
	INRUSH CURRENT (Typ.)	4.0A/115VAC 2.5A/230VAC 80A/230VAC									
	LEAKAGE CURRENT(max.)	3mA/240VAC									
		105 ~ 150% rated output power									
	OVER LOAD	Protection type : Shut down o/p voltage, re-power on to recover									
		+3.3V, +5V: 110% ~ 140% of rated voltage ; +12V:13.2V ~ 16V									
PROTECTION	OVER VOLTAGE	Protection type : Shut down o/p voltage, re-power on to recover									
		All output equipped with short circuit									
	SHORT CIRCUIT	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℃ 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 / 25°C/ 70% RH									
EMC	<b>EMI CONDUCTION &amp; RADIATION</b>	Compliance to EN55	022 (CISPR22) Class	B, Design refer to	FCC part 15 Class B						
(Note 4)	HARMONIC CURRENT	Compliance to EN61	000-3-2,-3								
	EMS IMMUNITY	Compliance to EN61	000-4-2,3,4, 5,6,8,11,	light industry leve	I, criteria A						
OTHERS	MTBF	94.1K hrs min. MIL-HDBK-217F (25°C)									
	CONNECTOR	ATX main power connector * 1ea; +12V power connector * 1ea									
		Peripheral power connector * 3ea; Floppy drive power connector * 1ea									
	COOLING	Forced air ventilation by 4cm DC fan									
	DIMENSION	260*83*40mm (L*W*	'H)								
	PACKING	1.46Kg; 10pcs/15.6k	(g/0.89CUFT								
NOTE	<ol> <li>Ripple &amp; noise are measure</li> <li>Load regulation is measure</li> <li>The power supply is consid EMC directives. For guidan (as available on http://www.</li> </ol>	Ity mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ity mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Ity at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf pa									



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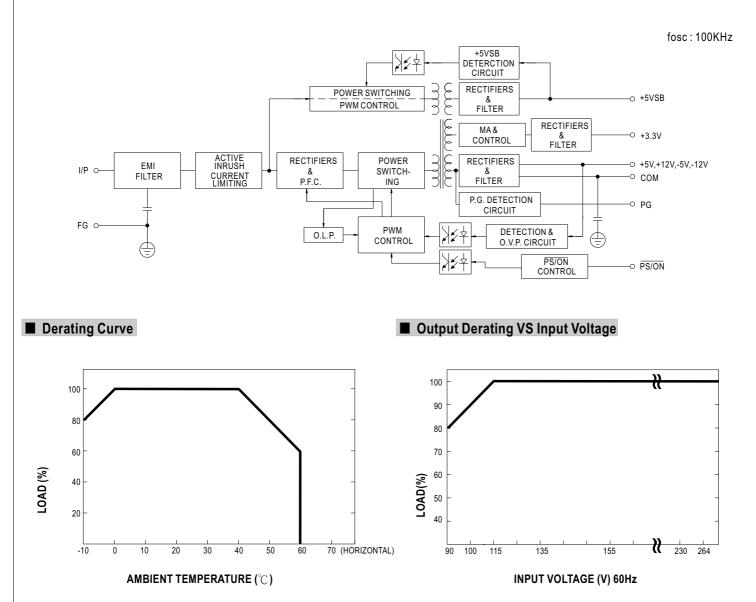


Case No. IPC-250 Unit:mm





#### Block Diagram





### 300W Industrial 1U ATX 12V/P4 PC Power Supply

# **IPC-300B**



Features :

- Meet 1U rack mount system
- Universal AC input / Full range
- Active power factor  $\geq$  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



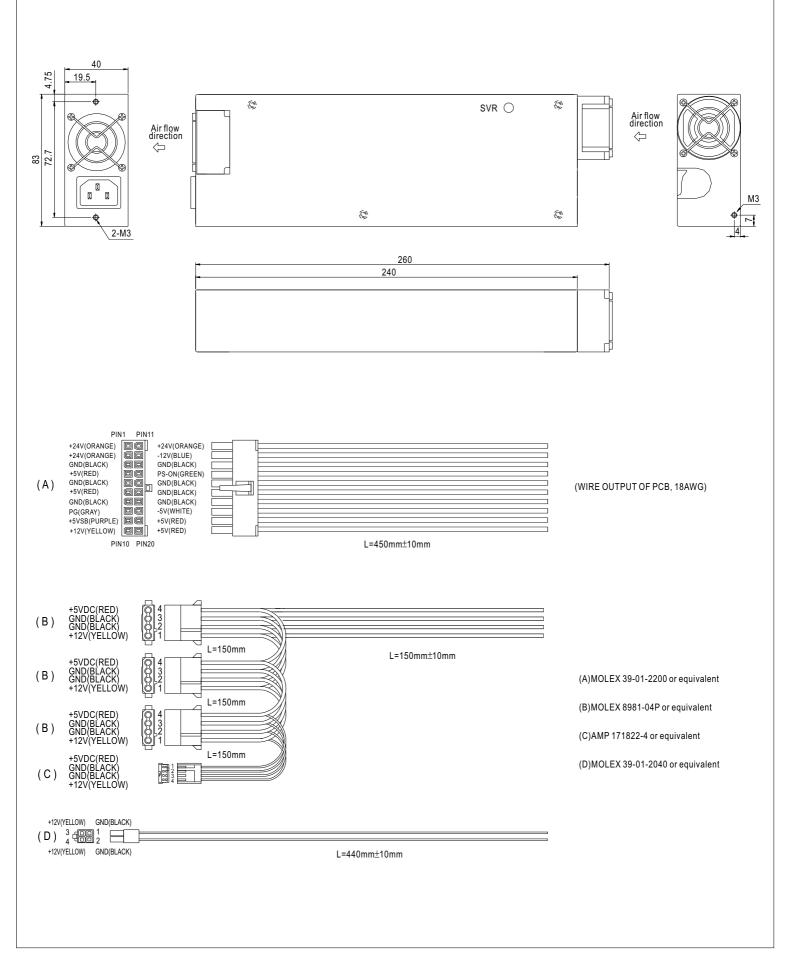
#### SPECIFICATION

MODEL		IPC-300									
	OUTPUT NUMBER	CH1	CH2	CH3	CH4	CH5	STANDBY				
OUTPUT	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				
		300W continue. +24V,+5V,+12V combine total power output shall not exceed 270W.(The +24 & +5Volt combine total output shall not exceed 150W)									
	RATED POWER	(The -5 & -12Volt combine total output shall not exceed 12W)									
	RIPPLE & NOISE (max.) Note.2										
	VOLTAGE ADJ. RANGE	CH2 : 5.05 ~ 5.5V									
	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/230VA	C 2500ms. 20n	ns/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.)										
	LEAKAGE CURRENT(max.)	40A/115VAC 80A/230VAC 3mA/240VAC									
	OVERLOAD	105 ~ 150% rated output power         Protection type : Shut down o/p voltage, re-power on to recover									
		+24V, +5V: 110% ~ 140% of rated voltage ; +12V:13.2V ~ 16V									
PROTECTION	OVER VOLTAGE	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	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"									
		$-10 \sim +60^{\circ}C$ (Refer to output load derating curve)									
ENVIRONMENT		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 / 25°C / 70% RH									
EMC (Note 4)	EMI CONDUCTION & RADIATION										
(NOLE 4)	HARMONIC CURRENT	Compliance to EN61	000-3-2,-3								
	EMS IMMUNITY	Compliance to EN61	000-4-2,3,4, 5,6,8,11,	light industry leve	I, criteria A						
	MTBF	94.1K hrs min. MIL-HDBK-217F (25°C)									
OTHERS	000000000	ATX main power connector * 1ea; +12V power connector * 1ea									
	CONNECTOR	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*H)									
	PACKING	1.46Kg; 10pcs/15.6Kg/0.89CUFT									
NOTE	<ol> <li>All parameters NOT special</li> <li>Ripple &amp; noise are measure</li> <li>Load regulation is measure</li> <li>The power supply is consid EMC directives. For guidant (as available on http://www.</li> </ol>	Ily mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. ad at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. d from 20% to 100% max. Load. ered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets ce on how to perform these EMC tests, please refer to "EMI testing of component power supplies."									



#### Mechanical Specification

Case No. IPC-250 Unit:mm





#### Block Diagram

