

ADP Series Power Adapters

19V 40W/65W/90W

ADP 19V



Highlights & Features

- Energy Star Compliance (Level VI)
- IT safety approvals
- 100k Hours MTBF
- Over-Voltage/Load/Temperature & Short Circuit protections
- Low Leakage Current

Safety Standards



CB Certified for worldwide use

Model Information

ADP Series Power Adapters

Model Number	Input Voltage Range	Output Voltage	Output Current
ADP-40KD BBBM	90-264Vac	19Vdc	2.1A
ADP-65JH HBAN	90-264Vac	19Vdc	3.42A
ADP-90MD HDM	90-264Vac	19Vdc	4.74A

Specifications

Input Ratings / Characteristics

	ADP-40KD BBBM	ADP-65JH HBAN	ADP-90MD HDM
Nominal Input Voltage		100-240Vac	
Input Voltage Range		90-264Vac	
Nominal Input Frequency		50-60Hz	
Input Frequency Rang		47-63Hz	
Input Current	1.2A Max at 100Vac input voltage	1.5A Max at 100Vac input voltage	
Inrush Current Limit (cold start)		No Damage	
Efficiency at nominal input voltage	85%	84%	
Active Mode Efficiency @ 115Vac		>88%	
Active Mode Efficiency @ 230Vac	>85.30%	>87%	>88%
No Load Power Consumption	<0.1W @ 115Vac/60Hz , <0.3W @ 230Vac/50Hz	<0.21W @ 115Vac/60Hz	
Leakage Current	<100uA at 240Vac/50Hz	<50uA at 240Vac/50Hz	<75uA at 240Vac/50Hz

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Output Ratings / Characteristics

	ADP-40KD BBBM	ADP-65JH HBAN	ADP-90MD HDM
Rated Voltage	19V		
Voltage Range	18.05 ~ 19.95V		
Current	2.1A	3.42A	4.74A
Output Ripple and Noise	350 mV pk-pk	300mV pk-pk	380mV pk-pk
Turn On delay time	5 seconds @ 100-240Vac	2 seconds @ 100-240Vac	
Hold-up Time	The output voltage shall be sustained 5mS within regulation requirement after loss 100Vac and maximum load.		
Rise Time	DC output rise time from 10% to 90% of output voltage shall be less than 30mS at nominal line and maximum load	DC output rise time from 10% to 90% of output voltage shall be less than 100ms at nominal line and maximum load	
Transient Load Response	0.1A to 100% load at 2.5A/us slew rate and frequency is 10Hz to 10KHz		0% to 50% and 50% to 100% 1.0A/us slew rate and frequency is 100Hz

Environment

	ADP-40KD BBBM	ADP-65JH HBAN	ADP-90MD HDM
Operating Temperature	0 °C to +40 °C		
Shipping/Storage Temperature	-30 °C to +80 °C		-20 °C to +85 °C.
Operating Humidity	8% to 90% RH (Non-Condensing)		
Shipping/Storage Humidity	5% to 95% RH (Non-Condensing)		
Lightning Surge Immunity	IEC-1000-4-5 Level 3 Requirements L-N 1KV/1.2 * 50uS 5 times No damage	IEC-61000-4-5 Level 3 requirements L-N 1KV/1.2 * 50uS 5 times No function error L-FG 2KV/1.2 * 50uS 5 times No damage.	
Electric Fast Transients (EFT)	IEC-1000-4-4/1995 EN 61000-4-4		
Electrostatic Discharge (ESD)	±15KV air discharge ±8KV contact discharge		
Dielectric Withstand Voltage (HI-POT)	Between AC input and secondary AC 3KV test time 1 minute; 100% of line products of this Adapter shall be applied 3000Vac for 2 seconds between AC input terminals and output terminals. Cut off current 3mA.	Between AC input and secondary AC 3KV test time 1 minute; 100% of line products of this Adapter shall be applied 3000Vac for 2 seconds between AC input terminals and output terminals. Cut off current 10mA.	100% of line products of this Adapter shall be applied 3000Vac for 1 seconds between AC input terminals and output terminals. Cut off current is 10mA.
Insulation Resistance	The insulation resistance shall be not less than 30M ohms after application of 500Vdc/10mA for 1 minute.		The insulation resistance shall be not less than 20M ohms after application of 500Vdc/10mA for 1 minute
Electromagnetic Interference (EMI)	(a) FCC Class B (b) CISPR 22 Class B (c) VCCI Class B	(a) FCC Class B (b) CISPR 22 Class B (c) VCCI Class B	(a) FCC Class B (b) CISPR 22 Class B (c) VCCI Class B
MTBF	150,000 hours	100,000 hours	
Altitude	5,000m (16,400 ft)		

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Protections

	ADP-40KD BBBM	ADP-65JH HBAN	ADP-90MD HDM
Over Voltage	The output shall be protected to latch off at over-voltage condition, maximum value can't be over 29V.	The output shall be protected to latch off at over-voltage condition, maximum value can't be over 27V.	The output shall be protected to latch off at over-voltage condition, maximum value shall be more than 22V and be less than 27V.
Overload / Overcurrent	The maximum constant current shall be more than 2.1A and be less than 5.0A at 90Vac and 264Vac. The adaptor shall be auto-recovery.	The maximum constant current shall be more than 4.1A. The adapter shall be Auto-recovery	The minimum constant current shall be more than 5.214A. The maximum constant current shall be less than 6.636A. The output shall be protected to latch off at over-current condition.
Over Temperature	Latch Mode		
Short Circuit	Auto-Recovery		

Mechanical

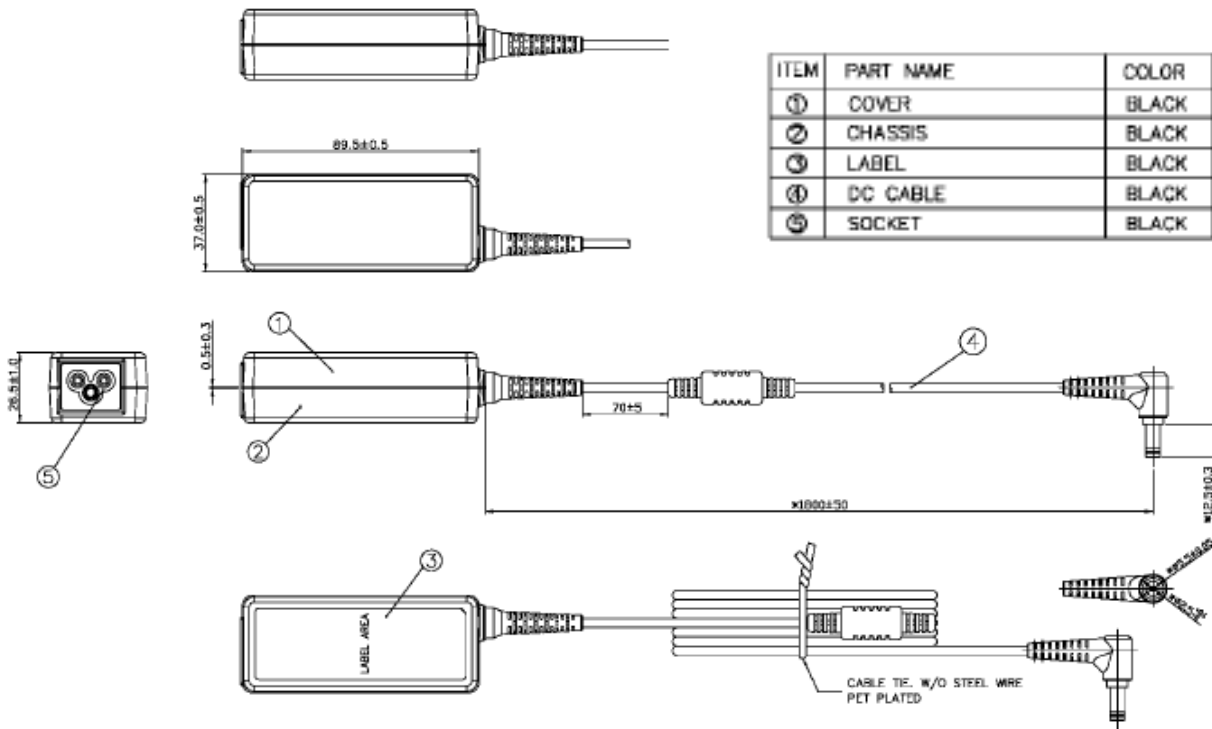
	ADP-40KD BBBM	ADP-65JH HBAN	ADP-90MD HDM
Color	Black		
Outline Dimensions (L x W x D)	89.5 * 37.0 * 26.5 mm 3.52 * 1.45 * 1.04 in	108.0 * 46.0 * 29.5 mm 4.25 * 1.81 * 1.16 in	127.0 * 51.0 * 30.5 mm 5.0 * 2.0 * 1.2 in
AC Inlet Type	Socket C6 type		
DC Cable Type	UL 1571 22AWG	UL1571 #AWG18	#AWG18
DC Cable Length	1800 mm		
DC Connector - OD	5.5 mm	5.5 mm	5.5 mm
DC Connector - ID	2.5 mm	2.5 mm	1.7 mm
DC Connector - Length	12.5 mm	11 mm	11 mm

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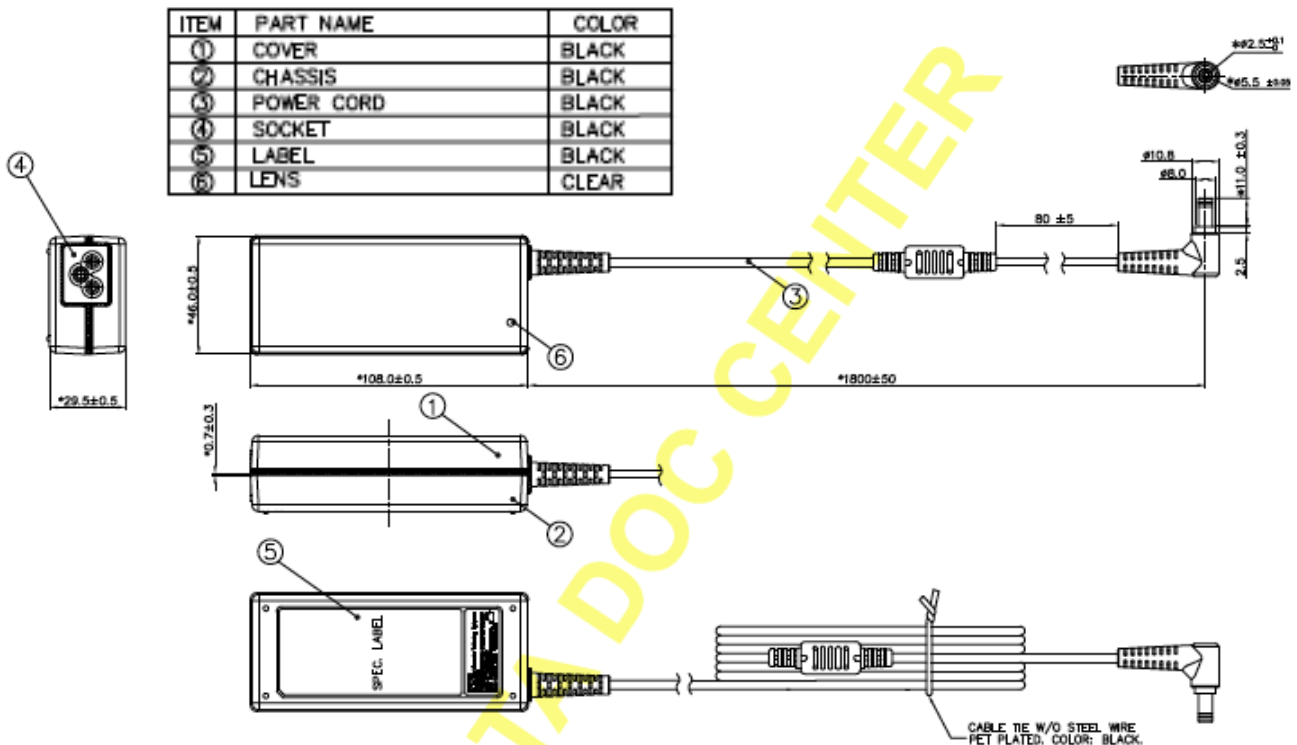
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Mechanical

ADP-40KD BBM



ADP-65JH HBAN



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ADP-90MD HDM

