

# **TECHNICAL DETAILS & SPECIAL FEATURES**

#### COMPATIBLE WITH THE LATEST PC TECHNOLOGIES

Supports the newest specifications of ATX12V & EPS12V Created for usage with current and next-generation multi-core CPU and GPU platforms

# **EFFICIENCY (80-plus certification):**

Due to the extremely high efficiency of the COUGAR®-Series you can reduce your electricity costs in spite of high performance. In addition, less energy is converted into heat, which improves the cooling of the entire PC. Furthermore, the PSU fan can rotate more slowly, which reduces the noise-level of the whole system. In short, the PSU is efficient, cool and silent! You can find further information on the 80-plus certification on http://www.80plus.org.

### **ENERGY STAR®:**

The PSUs of the COUGAR®-Series support the newest Energy Star standard. Thus COUGAR®-PSUs can be used for Energy Star® compatible systems.

### **ENVIRONMENT:**

The PSUs of the COUGAR®-Series adhere to the current guidelines 2002/95/EC (RoHS and WEEE) of the European Union. They contain no environmental pollutants; thus we as manufacturers and you as a customer support environmental protection.

#### INDEPENDENT CIRCUITS:

Each different output voltage of the COUGAR®-PSU has its own internal switching and is protected against overloading and underloading through multiple safeguards. Therefore, the output voltages are considerably more stable and subject to far smaller voltage noises, bringing them much closer to their ideal values.

### **DYNAMIC LOAD DISTRIBUTION 12V:**

All PSUs of the COUGAR®-Series have an automatic dynamic load distribution on the 12V line. If you are not using all output lines, the PSU automatically reroutes needed power from unused lines. This improves the performance of the 12V lines considerably for systems with high-end graphics cards in SLI® or CrossFire® mode.

### **MULTI-GPU COMPATIBLE**

NVIDIA SLI™ and ATI CrossFireX™ certified

### **ULTRA-QUIET & TEMPERATURE-CONTROLLED PSU FAN:**

Extremely Low Noise Level at (17-25dB)

All PSUs of the COUGAR® CM-Series are equipped with a large and very quiet 140mm fan, which adapts its rotating speed to the PSU temperature. Even on its highest rotating level the fan is still quiet enough to be barely noticeable.



## ATX 12V Design Standard:

PSUs of the COUGAR®-Series correspond to the most current ATX-standards. Multicore CPU and GPU systems are fully supported. Equipped with 6 pin / 8 pin PCI-Express plugs which are supplied through separate +12V lines, the COUGAR®-Series PSUs especially excels in the stable supply of multi-GPU systems.

#### MAINBOARD CONNECTOR:

Because of the variable ATX main connector the COUGAR®-Series is compatible to the older ATX-standards as well. COUGAR® PSUs with 700 W or more also support E-ATX server mainboards with an additional 8 pin EPS 12V connector. All other PSUs have a 4+4 pin plug and can be used as 4 pin or as 8 pin solution.

### FLEXIBLE CABLE MANAGEMENT (Only for CM modes):

The cables for the disk drives and/or graphics cards always have on one end an 8-point plug, which fits directly into the PSU. Make sure to match the colours of the plug and the connector: red with red, black with black. On the other end of the cables you will find the plugs to the respective components. For more information on the correct installation of your components please read the respective manuals of the manufacturers.

#### **EMC SOLUTION**

Electro Magnetic Compatibility: Electromagnetic filtering protects the system against radiation interferences and extend system lifetime

# **SPECIFICATION**

#### **RATING**

Model Name	AC Input	DC Output									00 Dl.:-0			
woder warne		+3.3V	+5V	+12V1	+12V2	+12V3	+12V4	+12V5	+12V6	-12V	+5Vsb	Total output	80 Plus®	
Cougar 400 CM	AC 100-240V~	24A	15A	20A	20A	ı	ı	-	ı	0.24	0.24	2.5A	400W	80
Cougai 400 OM	50-60Hz 8A	120	120W 384W		-			_	0.3A	2.5A	40000	PLUS BRONZE		
Cougar 550 CM		24A	15A	28A	20A	1	ı	1	ı	0.3A	2.5A	550W	80	
Codgai coo civi	AC 100-240V~ 50-60Hz 10A	120W 480W		0W			_	0.3A	2.57	330 * *	PLUS BRONZE			
Cougar 700 CM		24A	20A	30A	30A	_	ı	_	_	0.3A	2.5A	700W	80	
Cougai 700 OM		150W 648W				-	0.5A	2.5A	70000	PLUS BRONZE				
Cougar1000 CM	AC 115-240V~ 50-60Hz 15-10A	30A	30A	24A	24A	24A	24A	28A	28A	0.8A 4A		1000W	80	
Godgar 1000 Olvi		175W 960W			0.07	44	100000	PLUS* BRONZE						
Cougar1200 CM	AC 115-240V~	30A	30A	24A	24A	24A	24A	28A	28A	0.8A 4A		1200W	80	
J Godgai 1200 GW	50-60Hz 17-10A	175W			1080W				U.OA   4A	120000	80 PLUS			



# **CABLES & CONNECTORS**

Item Name / Connector									The state of the s
			III						
		Main Conn.	Peripheral Conn.	Floppy Conn.	ATX12V Conn.	ATX/EPS 12V Conn.	S-ATA Conn.	PCI-E Conn.	PCI-E Conn.
Pin		24(20+4) Pins	4 Pins	4 Pins	4 Pins	8(4+4) Pins	5 Pins	6 Pins	8(6+2) Pins
Cougar	Native	1	2	1	1	_	_	_	_
400ČM			3	-	_	_	4	1	-
Cougar	Cougar Native	1	2	1	_	1	-		
550ČM Modular		_	3	_	_	_	4	1	1
Cougar	Native	1	3	1	1	1		1	1
700ČM	Modular	_	3	_	_	_	6	1	1
Cougar	Native	1	_	_	1	1	-	1	1
1000CM	Modular	_	7	1	_	_	8	2	2
Cougar	Native	1			1	1	_	1	1
1200CM	Modular	_	7	1	_	_	8	2	2

Cables(Unit:mm)	400W	550W	700W	
Peripheral Peripheral Peripheral  500  150  150	1	1	1	
S-ATA S-ATA S-ATA  500  150  150	_	_	2	M
S-ATA S-ATA 500 150	2	2	_	
PCI-E 6 Pin	1	1	1	N
PCI-E 8 Pin 500	_	1	1	



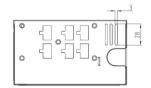
Cables(Unit:mm)	1000W	1200W	
Peripheral Peripheral Floppy  500  150  150  150	1	1	
Peripheral Peripheral Peripheral Peripheral Solution 150 150 150 150	1	1	N
S-ATA S-ATA S-ATA S-ATA  500  150  150  150	2	2	
PCI-E 6 Pin	2	2	
PCI-E 8 Pin 500	2	2	N

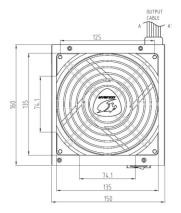
# **DIMENSIONS**

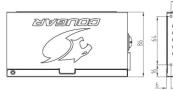
Dimension (L*W*H) mm	400 / 550 / 700CM : 150 x 160 x 86 1000 / 1200CM : 150 x 180 x 86
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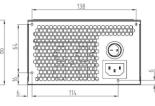


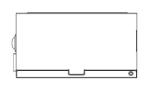
# COUGAR 400/550/700 CM



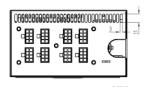


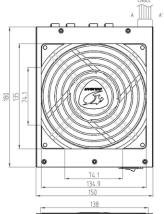




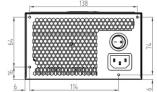


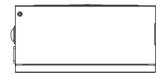
# COUGAR 1000/1200 CM













### **SAFETY FUNCTIONS**

# **UVP** (Undervoltage protection)

If the voltages fall below a certain tolerance value on the single lines, the PSU automatically switches off.

## **OVP** (Overvoltage protection)

If the voltages increase above a certain tolerance value on the single lines, the PSU automatically switches off.

## **SCP** (Short-circuit protection)

In the case of a short-circuit this feature prevents damage to the core components of the PSU and its system components.

## **OPP** (Overload protection)

If the system is oversized and requires more power from the PSU than it can perform, this protection function is activated.

### **OCP** (Overcurrent protection)

If the load on a single line is higher than indicated, the PSU automatically switches off.

### **SAFETY & EMI CERTIFIED:**













