ASRock PSU Selection Guide | Recommended Power for Your GPU & CPU

Choosing the right power supply is crucial for system stability and performance.

Use the table below to quickly find the recommended PSU wattage based on your GPU and CPU series. Simply locate your GPU model and CPU series, then check the intersecting value to determine the ideal PSU wattage. Please note that this table is a general guideline and does not cover every CPU and GPU model.

The recommended wattage is not just the sum of the GPU and CPU power consumption–it includes additional headroom for system components such as fans, cooling solutions, storage drives, and memory. The final value is rounded up to the nearest standard PSU wattage for practical selection.

GPU / CPU		Intel Non-K (Ultra 5, Core i5) AMD AM4/AM5 Ryzen 7/5	Intel non-K (Ultra 9/7, Core i9/i7) AMD AM4 Ryzen 9/7/5 AM5 Ryzen 7	Intel K (Core/Ultra) AM5 Ryzen 9/7	Intel HEDT AMD Threadripper
NVIDIA 50 Series	RTX 5090	1000W	1000W	1000W	1300W
	RTX 5080	850W	850W	850W	850W
	RTX 5070 Ti	750W	750W	750W	850W
	RTX 5070	650W	650W	650W	750W
NVIDIA 40 Series	RTX 4090	850W	1000W	1000W	1300W
	RTX 4080	750W	850W	850W	1000W
	RTX 4070 Ti	750W	850W	850W	1000W
	RTX 4070	650W	750W	750W	850W
	RTX 4060 Ti	650W	650W	650W	750W
	RTX 4060	550W	550W	550W	750W
NVIDIA 30 Series	RTX 3090 Ti	850W	1000W	1000W	1300W
	RTX 3090	750W	850W	850W	1000W
	RTX 3080 Ti	750W	850W	850W	1000W
	RTX 3080	750W	850W	850W	1000W
	RTX 3070 Ti	650W	750W	750W	850W
	RTX 3070	650W	650W	750W	850W
	RTX 3060 Ti	650W	650W	750W	750W
	RTX 3060	650W	650W	650W	750W
	RTX 3050	550W	550W	550W	750W
AMD 9000 Series	RX 9070 XT	750W	750W	850W	1000W
	RX 9070	650W	650W	750W	1000W
AMD 7000 Series	RX 7900 XTX	850W	1000W	1000W	1300W
	RX 7900 XT	750W	850W	850W	1000W
	RX 7800 XTX	650W	750W	750W	850W
	RX 7700 XT	650W	750W	750W	850W