

# Conductor Sizing

The American Wire Gauge System (AWG) standardizes conductor sizing and all Genesis Cables follow this system. As the gauge number decreases, conductor size increases. This lowers resistance, increases the amount of power that can be safely transferred by the conductor and extends the length of runs. Choosing cable with the correct gauge is essential for system performance.

DC Resistance (at 20 °C)					
AWG	Conductor Comparison	Solid Conductor		Stranded Conductor	
		Ohms per 1000 feet	Ohms per kilometer	Ohms per 1000 feet	Ohms per kilometer
24		28.6	93.8	26.47	87.6
23		22.3	73.2	21.1	69.2
22		18	59.1	16.9	55.4
20		11.1	36.4	10.5	34.4
18		6.52	21.4	6.66	21.9
16		4.1	13.5	4.19	13.7
14		2.57	8.45	2.62	8.60
12		1.62	5.31	1.65	5.41
10		1.02	3.34	1.04	3.41
8		0.6407	2.102	0.6535	2.144