

Astro 60 Brushless Motor p/n 860GM-4T

The Astro 60 Brushless Geared Motor is designed for maximum power and efficiency in a very small size. Only 2.15 inches in diameter and 2.4 inches long, the Geared motor weighs 21 ounces (600 grams). The 60 motor requires a high voltage sensorless speed control like the Phoenix HV45 or HV85. The motor features two ball bearings, an eight pole samarium cobalt rotor and two inch 24 slot stator. The gear box has two ball bearings and stainless steel helical gears. Motor efficiency runs between 88% and 92% for most applications. Astro battery side connector (#521) included for your own speed controller.

Motor Name	Astro 60 Geared
Stock Number	860GM-4T
Stator Winding	4 Turns #16
Motor Speed Constant Kv	550 Rpm per Volt
Motor Torque Constant Kt	2.5 in. oz. per Amp
Gear Ratio	3.1 to 1 reduction
Geared Speed Constant	177 Rpm per Volt
Geared Torque Constant	7.6 in. oz. per Amp
Winding Resistance	30 Milliohms
Motor No load current	1.2 Amps
Best Efficiency @ 28V	93% @ 33 Amps
Max. Continuous Amps	45 Amps
Max Amps 30 sec Burst	60 Amps
Maximum Power	1600 watts
Motor Diameter	2.20 inches
Motor Length	2.40 inches
Motor Weight	450 grams
Shaft Diameter	0.250 inches
Prop Adaptor	5/16 x 24
Bearings	2 ball bearings
Rotor Type	8 pole SMCO
Stator Lamination	24 Slot 2 in dia
Required Speed Control	Sensorless HV45
Typical Prop	11 to 13 inch Diameter

Astro 860GM-4T Geared Motor running on 24.5 volts (7 Cell Lipo Pack) with a Castle HV85 Speed Control

Prop	Amps	Watts	Rpm
18 x 10 APCE	21 Amps	500 Watts	4,800 Rpm
20 x 10 APCE	26 Amps	650 Watts	4,600 Rpm
22 x 10 APCE	35 Amps	875 Watts	4,400 Rpm

Running on 28 volts (8 Cell Lipo pack) With a Castle HV85 Speed Control

Prop	Amps	Watts	Rpm
18 x 10 APCE	27 Amps	775 Watts	5,400 Rpm
20 x 10 APCE	33 Amps	925 Watts	5,200 Rpm
22 x 10 APCE	44 Amps	1275 Watts	5,000 Rpm

Running on 35 volts (10 Cell Lipo Pack) With castle HV85 Speed Control

Prop	Amps	Watts	Rpm
18 x 10 APCE	33 Amps	1375 Watts	6,200 Rpm
20 x 10 APCE	48 Amps	1725 Watts	6,000 Rpm
22 x 10 APCE	63 amps	2200 Watts	5,700 Rpm

Other Astro Items You May Need

p/n	Name
101	Super Whattmeter
105	Servo Tester
123	A123 Charger 1-10 cells
110	Nimh Charger 1-24 cells
521	Astro 3 pin Connectors
525	Astro 2 pin Connectors

*Astro Flight Inc. 3 Watson
Irvine CA, 92618*

Ph (949) 855-9903 Fax (949) 597-1729

Web: www.astroflight.com info@astroflight.com

Astro 60 Brushless Geared Motor P/N 860GM

