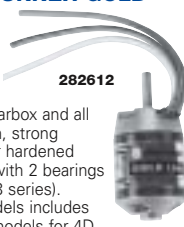


AIRPLANE ELECTRIC MOTORS

AXI BRUSHLESS OUTRUNNER GOLD MOTORS

Axi brushless motors outperform brushed motors nearly 2:1, in aircraft ranging from ultra-light indoor aerobats to complex 3D outdoor models. None require gearbox and all feature a high-torque, rotating can, strong neodymium magnets and a carbon or hardened steel shaft. Motors are available with 2 bearings (22-28 series) or 3 bearings (41-53 series). The **22-Series** for 0.15-1.5 kg models includes the hollow-shaft **2208** and **2212** models for 4D. The high-performance **28-Series** is for planes up to 1.5 kg and sailplanes up to 3 kg. **41-Series** motors are designed for 3.5-6 kg sailplanes and 3-4.5 kg aerobats. High-torque **53-Series** motors can spin large props efficiently, in scale models weighing up to 15 kg! All include a 2-year warranty.



		RETAIL	TOWER
AXSG0346	220346 2203/46	59.90	59.90
AXSG0454	220454 2204/54	64.60	64.60
AXSG0820	220820 2208/20	64.60	64.60
AXSG0824	220824 2208/24	74.90	74.90
AXSG0826	220826 2208/26	64.60	64.60
AXSG0834	220834 2208/34	64.60	64.60
AXSG1220	221220 2212/20	67.90	67.90
AXSG1226	221226 2212/26	67.90	67.90
AXSG1234	221234 2212/34	67.90	67.90
AXSG1412	281412 2814/12	81.50	81.50
AXSG1416	281416 2814/16	81.50	81.50
AXSG1420	281420 2814/20	81.50	81.50
AXSG1720	221720 2217/16	74.90	74.90
AXSG1720	221720 2217/20	74.90	74.90
AXSG2010	282010 2820/10	85.60	85.60
AXSG2014	412014 4120/14	129.90	129.90
AXSG2018	412018 4120/18	129.90	129.90
AXSG2608	282608 2826/8	93.80	93.80
AXSG2612	282612 2826/12	93.80	93.80
AXSG3016	413016 4130/16	137.40	137.40
AXSG3020	413020 4130/20	137.40	137.40
AXSG4514	534514 5345/14	239.90	239.90

AXI BRUSHLESS IN-RUNNER MOTORS

These 300-size brushless motors feature neodymium magnets and unique solder posts for easy wiring. The **Mini AC 1215/16** with carbon-fiber case is ideal for micro helis, ducted fans and 300-480 size planes up to 850g. The most powerful is the **Mini AC 1215/Extreme**. It's designed for high performance 480-600 size aircraft up to 1200g and includes a hardened aluminum VMGM planetary gearbox. All include a 2-year warranty.



AXSG1509	121509 Mini AC 1215/09 In-Runner	84.90	84.90
AXSG1512	121512 Mini AC 1215/12 In-Runner	84.90	84.90
AXSG1516	121516 Mini AC 1215/16 In-Runner	84.90	84.90
AXSG1520	121520 Mini AC 1215/20 In-Runner	84.90	84.90
AXSG9915	1215EX Mini AC Extreme 6:1 In-Runner	134.90	134.90

AXI RADIAL MOUNTS

RMS41



Designed especially for Axi's brushless outrunner motors, these low-cost, aluminum-constructed mount sets keep your motor in place and cash in your pocket! All feature hardware, mount plate, lock collar or secure ring, prop adapter and washer. Versions available for **22**, **28**, and **41** series motors. Assembly diagram included.

AXSG0003	RMS22 Radial Mount Set AXI22 Series	12.90	12.90
AXSG0004	RMS28 Radial Mount Set AXI28 Series	13.90	13.90
AXSG0005	RMS220 Radial Mount Set AXI2820	13.90	13.90
AXSG0006	RMS41 Radial Mount Set AXI41 Series	18.50	18.50

GOLDEN HORIZONS AIR POWER BRUSHLESS MOTORS

Designed for use with park flyers, these brushless motors from Golden Horizons feature a sensorless design, with a finned motor can that acts as a heatsink. Both motors are 28mm in diameter and 45mm long, with a weight of 75g. Both are suitable for 6-10 cells. Choose from **3600 rpm** or **4700 rpm** models. Both require prop adapter, brushless ESC and mounting hardware.



GHHG9100	07001 Air Power 3600 RPM	69.99	54.99
GHHG9101	07002 Air Power 4700 RPM	69.99	54.99

GWS POWER SYSTEMS & GEAR DRIVES

GWS Gear Drives feature a black plastic spinner for two-bladed props and high-quality gears protected by a durable, lightweight housing. Choose between 5.33:1 or 6.60:1 gear ratios for **300/350-Size Motors** or a 3:1 gear ratio for **400-Size Motors**. All drives require a motor, propeller, battery and charger. Power Systems feature mounted motors and leads w/micro pin connector, gear housing, pinion and spur gears, black plastic spinner and prop adapter. Choices include the **C1DX-C4D** with a Mabuchi 7B motor, 6.60:1 gear drive and a 1" spinner; the **1D4C-4C4D** with an EM400 ball bearing motor, 3:1 gear drive and a 1 1/4" spinner; and the direct-drive **CN12-RXC** w/2 props.



CN12-RXC

		RETAIL	TOWER
GWSA9010	AM-EPS2/E EPS-300C/350C Gearbox 5.33:1	8.75	7.99
GWSA9011	AM-EPS2/F EPS-300C/350C Gearbox 6.60:1	8.75	7.99
GWSA9015	AM-EPS2/F EPS-400C Gearbox w/Pinion 3.00:1	8.75	7.99
GWSG2005	C1DX-C4D w/Spinner	16.63	14.99
GWSG2010	C1CX35-C4C w/Spinner	16.63	14.99
GWSG2011	C1DX35-C4D w/Spinner	16.63	14.99
GWSG2015	1D4C-4C4D w/Spinner	14.00	12.69
GWSG2021	12XC-42 w/Spinner	14.88	13.99
GWSG2023	IPS-DX2B8-AXCS 1AXC-4A w/Spinner	14.88	13.99
GWSG2029	CN12-RXC Motor (1)/EP3020 Prop (2)	10.75	8.99
GWSG2030	280 Motor/EP5030 Prop/Safety Spinner	8.63	6.99
GWSG4018	EM400 DC Motor PKMOT-1012-B EPS	10.00	8.09
GWSG4019	EM400 DC Motor PKMOT-1009	6.25	5.09

GWS GEAR PULLERS

Change pinions easily with a GWS gear puller. The pinions can be removed with a selection from one of three included tail spindles. The gear pullers are all-metal construction, with a brass puller body and guide bolt. **Micro** puller is used for motors with shaft sizes of 1.0mm-2.0mm; **Standard** size works for 2.0mm-3.2mm shafts. Instructions are included.

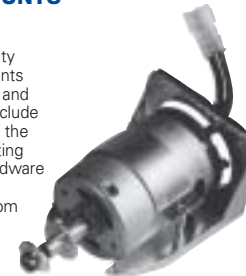


GWSG3001

GWSG3000	Gear Puller Tool Micro	12.50	10.99
GWSG3001	Gear Puller Tool Standard	15.00	12.09

J'TEC MOTOR MOUNTS

Made of lightweight, cast aluminum, these high-quality American-made mountmots are available to fit **.035-.15** and **.25-.40** motors. Both kits include aluminum straps to secure the motor and 2 sets of mounting holes. Kits also include hardware and instructions. See www.towerhobbies.com for details.



JT-EL1

JTCG8001	JT-EL1 Electric Motor Mount .035-.15	18.99	17.49
JTCG8002	JT-EL2 Electric Motor Mount .25-.40	24.99	21.99

MASTER AIRSCREW® FLIGHT ACCESSORIES

Master Airscrew's **Electric Flight Packs** feature a .05 ferrite motor, reduced-drive gearbox, hub, prop, spinner and motor mount w/hardware. The 12 x 8 prop is 'glass-filled nylon, hinged to a lightweight aluminum hub; wide, undercambered blades offer greater thrust for longer glide times. Wiring and 7.2V battery required. The **3.0:1 Gearbox** features a compact, lightweight design, 'glass-filled nylon output gear, gears, bearings and equal distance between gear combinations for easy model modification. Requires an aluminum motor mount, 1.75" spinner, 12 x 8 folding prop, wiring harness and 7.2V battery. Also available: 19-turn **05 Motor** and **S-400 Prop Adapter**.



MA3410

MASG2020	MA3410 S-400 Prop Adapter w/6x3	6.95	6.69
MASG3030	MA3030G 3.0:1 Gearbox	22.95	19.99
MASG3550	MA3550 Speed 550 7.2V 05 Elec Motor	15.95	14.69
MASG4000	MA3030K 3.0:1 Electric Flight Pack	44.95	37.99
MASG4010	MA3035K 3.5:1 Electric Flight Pack	44.95	37.99

MULTIPLEX® MOTORS & ACCESSORIES



M332484

Fine-tune your favorite plane with Multiplex's assortment of inrunner motors, gear drives and ESCs! Direct-drive **Permax Brushless** motors (MM332451, -453, -455, -483, -484, -472 and -479) install with drop-in ease, yet offer up to 3 times the power of traditional "can" motors. They're also ideal for ducted fan use, thanks to extreme RPM and current ratings. All feature a 2-year limited warranty and are compatible with Multiplex universal planetary gear drives. **Motor and Gear Drive** combos (M332480, -481) are perfect for 25-60 oz. gliders and feature the Permax's sensorless design, neodymium rotor magnets, installed planetary gear, hardware and connectors. **Motor and ESC** sets (332459, -476, -478, -482 and -491) pack a powerful punch for 12-20 oz. aircraft such as Zagsis and Multiplex's Micro Jet. **Motor, ESC and Gear Drive** combos (332473 and -489) include shrink tubing, mounting template and connectors. Also available: a 4.4:1 **Gear Drive** (332466)

		RETAIL	TOWER
MPUG2451	M332451 Permax Brushless BL-400/4D	89.95	69.99
MPUG2453	M332453 Permax Brushless BL-400/8D	89.95	64.99
MPUG2455	M332455 Permax Brushless BL-400/4D	89.95	64.99
MPUG2580	M332480 Brshlss 4T Motor w/Gearbox	129.95	107.99
MPUG2581	M332481 Brshlss 6T Motor w/Gearbox	129.95	107.99
MPUG2853	M332483 Brshlss 4T Direct Drive	89.95	69.99
MPUG2854	M332484 Brshlss 6T Direct Drive	89.95	69.99
MPUG3459	332459 Micro Jet Brushless Motor w/ESC	189.95	156.99
MPUG3466	332466 Universal Planetary Grbox 4.4:1	89.95	64.99
MPUG3472	332472 480/3D Motor	89.95	69.99
MPUG3473	332473 480/4G w/4.4:1 Grbox & 37A ESC	249.95	179.99
MPUG3476	332476 480/4D w/Multicont 37A ESC	199.95	139.99
MPUG3478	332478 480/8D w/Multicont 25A ESC	179.95	134.99
MPUG3479	332479 Permax BL-480/5D Direct Drive	89.95	74.99
MPUG3482	332482 480/3D w/Multicont 37A ESC	199.95	149.99
MPUG3489	332489 480/6G Motor w/3.3:1 Gearbox	129.95	109.99
MPUG3491	332491 480/5D w/Multicont 37A ESC	199.95	149.99

VENOM™ AIR CIRCUIT BRUSHLESS MOTORS

Sink your teeth into high-performance action with low-cost Venom brushless motors! **Out-runner Motors** (8035-8044) are lightweight, easy to install and maintenance-free. Neodymium magnets help produce the low-end torque that turns large props efficiently without the use of a gear drive. Motors with long or extra-long cans (see L or XL in description) include a machined billet aluminum prop nut and gold-plated bullet connectors. Some even provide enough muscle to replace glow engines.



F7748

Just add a brushless ESC and LiPo battery and you have a complete brushless performance package! **Venom In-runner** motors include: **4980kV** 18A is ideal for many park flyers with gear drive setups, ducted fan jets up to 60mm and micro R/C cars. **32A 3125kV** motor is for park flyers using a 4:1 gear drive and 9 x 6 prop. Also available: the **3200kV** Night Ranger 3D motor! See www.towerhobbies.com for a complete list of details and requirements.

VNRC1360	1360 V20L 4980kV Brushless Motor	49.99	41.99
VNRC1361	1361 V20L 3980kV Brushless Motor	49.99	41.99
VNRC1362	1362 V20L 3350kV Brushless Motor	49.99	41.99
VNRC1363	1363 V40 3125kV Brushless Motor	54.99	43.99
VNRC1365	F7748 3200kV Brushless Motor NR3D	49.99	39.99
VNRC8035	VENF-8035 V28 1925kV Out-runner	58.99	59.99
VNRC8036	VENF-8036 V28 1200kV Out-runner	58.99	59.99
VNRC8037	VENF-8037 V28L 1275kV Out-runner	69.99	69.99
VNRC8038	VENF-8038 V28L 750kV Out-runner	69.99	69.99
VNRC8039	VENF-8039 V35 1575kV Out-runner	79.99	79.99
VNRC8040	VENF-8040 V35 975kV Out-runner	79.99	79.99
VNRC8041	VENF-8041 V35L 1125kV Out-runner	89.99	89.99
VNRC8042	VENF-8042 V35XL 1100kV Out-runner	99.99	99.99
VNRC8043	VENF-8043 V50 400kV Out-runner	149.99	149.99
VNRC8044	VENF-8044 V50L 300kV Out-runner	159.99	159.99