



HERCULES SERIES

PRODUCT BROCHURE



Overview of Hercules Series

By extending range and mission agility for UAVs, integrated technologies that support hybrid propulsion cooperatively combining electric motors and internal combustion engines is advancing the modern uncrewed vehicles market, not only for aerial drones but across diverse land and marine use cases. ePropelled’s customizable UAV solutions cater to the specific needs of global drone OEMs. ePropelled’s engineers have overcome sector-specific challenges such as weight and size constraints, range limitations, and the integration of hybrid propulsion systems to provide customizable solutions for such uses as defense, agriculture, surveillance and inspection, public safety, and advanced mapping and navigation tasks.

Specifications for Hercules Motors & Controllers



SG750

The ePropelled SG750 Hercules Series delivers high performance and reliability for UAVs, providing extended flight times and quiet operation in a compact, efficient design.

Kv Rating (Tested as Generator)	No-Load, Line-to-Line Voltage Constant	Winding Type	Motor Dimension	Weight With Bearing	Weight Without Bearingless
101 Kv	7.4Vac/1000RPM	3-Phase	φ101 mm x 29.2 mm	440 g	410 g



SG1500

The ePropelled SG1500 Hercules series delivers high performance, extended flight times, and reduced noise in a compact, robust design for UAVs.

Kv Rating (Tested as Generator)	No-Load, Line-to-Line Voltage Constant	Winding Type	Motor Dimension	Weight With Bearing	Weight Without Bearingless
116 Kv	6.6Vac/1000RPM	3-Phase	φ127 mm x 41.9 mm	1,132 g	1,093 g



SG3000

The ePropelled SG3000 Hercules Series provides exceptional performance for UAVs with extended flight times, low noise, and high power. Its advanced design makes it a leading choice in UAV propulsion.

Kv Rating (Tested as Generator)	No-Load, Line-to-Line Voltage Constant	Winding Type	Motor Dimension	Weight With Bearing	Weight Without Bearingless
70 Kv	10.7Vac/1000RPM	3-Phase	φ127 mm x 41.9 mm	1,109 g	1,069 g



SG6000

The ePropelled SG6000 Hercules Series Starter Generator delivers high performance and versatility for UAVs with its slimline design and advanced technology..

Kv Rating (Tested as Generator)	No-Load, Line-to-Line Voltage Constant	Winding Type	Motor Dimension	Weight With Bearing	Weight Without Bearingless
99 Kv	7.5Vac/1000RPM	3-Phase	φ186 mm x 50.9 mm	2,450 g	2,350 g



SG12000

The ePropelled SG12000 Hercules Series Starter Generator offers exceptional power, extended flight time, and reduced noise, designed to meet the high demands of UAV applications.

Kv Rating (Tested as Generator)	No-Load, Line-to-Line Voltage Constant	Winding Type	Motor Dimension	Weight With Bearing	Weight Without Bearingless
78 Kv	9.5Vac/1000RPM	3-Phase	φ188 mm x 67.4 mm	4,300 g	4,200 g



EESMC6000

The ePropelled EESMC6000 can operate in propulsion mode and converts the starter generator into a propulsion motor (SG6000) which assists the ICE and provides the UAV with additional takeoff, landing, and agile maneuvering power.

Peak Power (60s)	Input Voltage Range	Start Duration	Start Trigger	Dimension (L x W x H)	Weight
20,000 W	24 V – 120 V	1s – 10s	CAN or digital	215 mm x 159 mm x 66 mm	1450 g



EES3000

The ePropelled electronic engine starter EES3000 Hercules Series powers the starter generator during the engine start sequence and can be triggered digitally via the controller area network (CAN) interface, or physically through pins on the connector.

Maximum Total Continuous Output Power	Input Voltage Range	Start Duration	Start Trigger	Dimension (L x W x H)	Weight
3000 W	24 V – 58 V	1s – 10s	2.3 V – 5 V	178.5 mm x 152.4 mm x 45 mm	950 g



iPS750

The ePropelled iPS750 Hercules Series converts 3-phase AC to regulated DC power for aviation systems and includes an electronic engine starter (EES) that switches to regulated voltage once the engine reaches operational speed.

Maximum Total Continuous Output Power	Primary Output Voltage	Secondary Output Voltage 1	Secondary Output Voltage 2	Onboard Battery Charging Voltage	Onboard Battery Charging Type	Dimension (L x W x H)	Weight
750 W	28 V	12 V - 14 V	5 V - 8 V	29.4 V	7S	201.9 mm x 99.3 mm x 54.0 mm	780 g



iPS1500

The ePropelled iPS1500 Hercules Series converts 3-phase AC to regulated DC power for avionics and other aviation systems, featuring an electronic engine starter (EES) that switches to regulated voltage at operational speed.

Maximum Total Continuous Output Power	Primary Output Voltage	Secondary Output Voltage 1	Secondary Output Voltage 2	Onboard Battery Charging Voltage	Onboard Battery Charging Type	Dimension (L x W x H)	Weight
1500 W	28 V	12 V - 14 V	5 V - 6 V	29.4 V	7S	204.8 mm x 155.2 mm x 50.0 mm	1,115 g



iPS3000

The ePropelled iPS3000 Hercules Series is a cutting-edge power management solution for UAVs converting 3-phase AC to regulated DC power, boosting efficiency, and reducing size and costs.

Maximum Total Continuous Output Power	Primary Output Voltage	Onboard Battery Charging Voltage	Onboard Battery Charging Type	Dimension (L x W x H)	Weight
3000 W	28 V, 48 V	29.4 V, 50.4V	7S	286.4 mm x 152.4 mm x 52.6 mm	1,540 g



iPS6000

The ePropelled iPS6000 Hercules Series is a high-performance UAV power system, converting 3-phase AC to regulated DC for enhanced reliability, efficiency, and reduced size and costs.

Maximum Total Continuous Output Power	Primary Output Voltage	Onboard Battery Charging Voltage	Onboard Battery Charging Type	Dimension (L x W x H)	Weight
6000 W	28 V, 48 V, 55 V	29.4 V	7S	295.3 mm x 277.6 mm x 52.6 mm	2,800 g

About ePropelled

ePropelled develops advanced propulsion and power systems for uncrewed platforms, built as a unified architecture (ePUA™) rather than standalone components. This reduces integration complexity, accelerates development, and improves operational confidence for OEMs and integrators.

Our solutions support UAVs, UGVs, USVs, robotics, and hybrid-electric platforms, delivering high power density, intelligent energy management, thermal efficiency, extended endurance, and improved mission readiness.

With a focus on performance, connectivity, and scalable electrification, ePropelled powers the next generation of autonomous and uncrewed mobility systems.

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