

PRODUCT BRIEF

EXTERNAL ENGINE STARTER

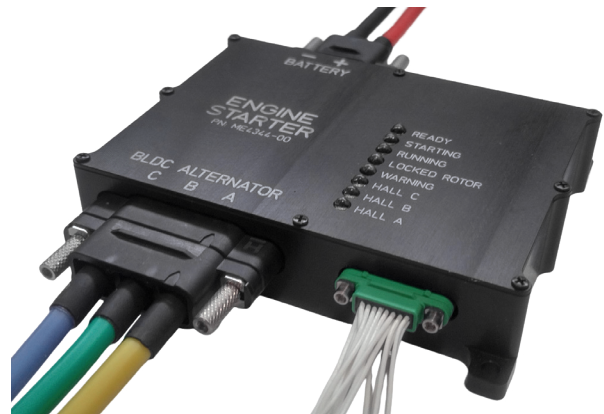
The Engine Starter is designed to start internal combustion engines up to 300cc in size. It is small, lightweight and delivers reliable engine starting without the use of decompression valves.



The engine starter drives the BLDC generator as a motor in order to start the engine. Once the engine is running the starter disconnects itself from the BLDC alternator to allow electrical power generation. A suitable BLDC alternator fitted with HALL sensors is required. Engine starting is initiated locally by push-button or remotely using CAN or RS-232 commands. In-flight restarts are possible via CAN or RS-232.

FEATURES

- Rapid and reliable starting - 1500RPM is typically achieved in under 0.5 Seconds.
- Maximum torque available from standstill.
- Operates from battery voltages of 20 to 55 VDC. Tolerates generated 3-phase voltages up to 140VAC.
- CAN, RS-232 and USB connectivity.
- Comprehensive front-panel diagnostics to aid integration and commissioning.
- User-friendly configuration software, with integrated graphing and logging to optimize and verify performance.
- Integrated HALL-sensor wiring and alignment checking.
- Weight: 190g
- Dimensions: 93.5 x 80.5 x 20mm



SPECIFICATIONS IN BRIEF

ELECTRICAL

Battery voltage	+20 to +55 VDC
Time to start	< 500ms (typical, eg 150ccm engine)
Cranking speed	500 -5000 RPM (user configurable)
Torque	typical, varies with BLDC alternator
BLDC pole count	2 - 32 poles (1 - 16 pole pairs)
BLDC alternator voltage	Tolerates up to 140 VAC PEAK

MISCELLANEOUS

Environmental protection class	IP50
Operating temperature range	-40°C to +85°C
Weight	190g
Dimensions	93.5 x 80.5 x 20 mm
Enclosure	Lightweight custom-machined aluminium
Connectors	Harwin KONA (input, output) and G125 for sensors and interface
Communications protocols	RS232 (57600 8N1), CAN (1Mb/S)

