VISION AIR TRONICS

Next Level Safety

PRODUCT BRIEF

UAV ENGINE STARTER

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PRODUCT BRIEF

The VISIONAIRtronics UAV Engine Starter is designed to start internal combustion engines up to 300cc in size. It is small, leightweight and delivers reliable engine starting with out 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 alterator 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

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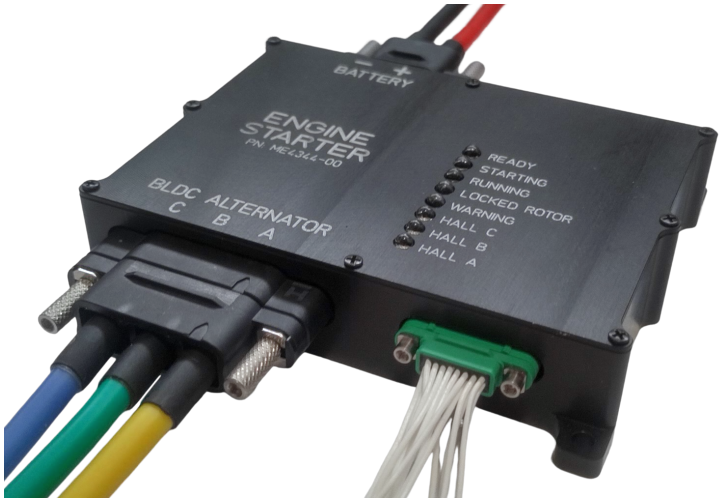
- Rapid and reliable starting - 1500RPM is typically achieved in under 0.5 Seconds.
- Maximum torque available from standstill.
- Operates from battery voltages of 20 to 55 VDC. Tolerates generated 3-phase voltages up to 140VAC.
- CAN, RS-232 and USB connectivity.
- Comprehensive front-panel diagnostics 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 20 mm



Engine Starter with cables sets attached

SPECIFICATIONS

SPECIFICATIONS IN BRIEF

Electrical

Battery voltage	20 to 55 VDC
Time to start	< 500 ms (typical , 150cc engine)
Cranking speed	500 -5000 RPM (user configurable)
Torque	20 Nm (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	190 g (6.7 ounces)
Dimensions	93.5 x 80.5 x 20 mm
Enclosure	Lightweight custom-machined aluminium
Connectors	Harwin G125 and KONA series
Communications protocols	RS232 (57600 8N1), CAN (1Mb/S)