



Description

The Corvid-50 (known as the B50i engine in the US) is the newest two stroke engine system co-developed by Currawong and Power4Flight.

Based on the Desert Aircraft DA-50, it features a custom throttle body, starter generator, inlet manifold and integrated isolation mount. It utilises Currawong's mature electronic fuel injection system and has an optional low noise exhaust (as pictured above).

The Corvid-50 engine package includes:

- base DA-50 engine with modified crankcase
- induction system with manifold and throttle body
- CDI ignition system
- miniature engine control unit (ECU)
- self priming fuel pump
- super atomising fuel injector
- manifold and cylinder head temperature sensors
- crank sensors
- generator (optional)
- low noise exhaust (optional)
- power supply (optional)
- soon to be released on board starting feature
- detailed operation and service manual

Specifications

Engine Type:	Air-cooled 2-stroke single
Displacement:	50cc
Weight:	2.5kg (5.4lb) (bare engine and generator, excluding low noise exhaust)
Power Output:	2.9kW (3.9HP) at 7000 RPM
Fuel Consumption:	450 g/kW-hr (0.74 lb/hp-hr) at cruise
Generator Output:	250W (500W intermittent duty cycle)

Features

- DA-50 engine as its base
- Stall-resistant throttle response
- Significantly expanded throttle-RPM envelope
- Full EFI suite including automotive-quality ECU processor, self-priming fuel pump, ignition, sensors, injector and custom intake, all with over 40,000 hours on UAV platforms
- The EFI system is plug-and-play compatible with Cloud Cap Technology's Piccolo Autopilot as well as having a documented API for CAN and Serial
- Integrated generator for use in powering the EFI system and providing power to charge on-board batteries and other electrical and electronic devices
- Excellent reliability – the EFI system maintains optimal engine operating parameters in all regimes of flight. No more problems with carburetor icing, top-of-climb engine stalls or incorrect fuel-air ratios, regardless of the conditions
- Ability to be started from cold between -20°C and +50°C (~0°F and 120°F)
- Reduced BSFC compared with carbureted engines of similar capacity
- Improved power output compared with carbureted engines of similar capacity
- Low noise exhaust option

Co-developed and distributed in the US & Canada by:



