



Date: March 5, 2024

A33H

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240 Uran Street
Hillsdale, MI 49242



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www.cobra-aero.com



DESCRIPTION

The A33H Engine System from Cobra Aero is the same core engine as the A33N with special modifications to optimize heavy fuel operation.



- High power to weight
- Low acoustic signature
- Additively manufactured cylinder, mount, intake, and exhaust system unlock design potential that other manufacturing methods can't (performance, weight, package, sound, efficiency, etc.)
- Hardware, electronics and software all designed specifically for UAS applications
- Machined crankcase with integrated belt driven starter-generator
- Integrated focal isolation mount
- Parallel hybrid capabilities help boost output when bursts of climb or sprint power are required

SPECIFICATIONS

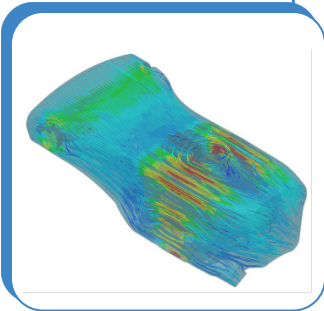
Engine Type:	Air-cooled 2-stroke single
Displacement:	33 cc (2.0 ci)
Mass:	3.15 kg (6.94 lbs) (Includes core engine, exhaust, focal isolation mount, ECU, fuel pump and accumulator, injector, ignition, generator, harnesses)
Power Output:	1.9 kW (2.5 HP) at 8050 RPM
PreHeat:	10 minutes @ 110 Watts
Fuel Consumption:	500 g/kW-hr (0.83 lb/hp-hr) cruise
Generator Output:	200W (400 W intermittent)
Fuel Type:	JP-5, Jet A, VP, P4F heavy fuel 50:1 premix

THE ENGINE PACKAGE INCLUDES

- Power4Flight IntelliJect ECU
- Self-priming fuel pump and accumulator
- All required EFI sensors and wire harnessing
 - CHT, MAT and Fuel pressure
 - Baro and MAP
 - CDI module
- Integrated preheating system
- Electric power generator
- Cooling duct with active control
- Optional IntelliGen PMU for starting charging and power augmentation capabilities

FEATURES

- Altitude compensation
- Onboard data logging, maintenance schedule, and logbook
- Full size spark plug for high altitude performance and improved MTBO
- Plug n' Play with multiple autopilots
- Free communications ICD and software developers kit for CAN and serial
- Free user interface for engine and configuration development





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A33H Performance Preliminary

