



Date: April 10, 2025

A33N

Datasheet - Page1

240 Uran Street
Hillsdale, MI 49242



P: 517-437-9100



F: 517-437-9101



www.cobra-aero.com



DESCRIPTION

The A33N Engine System is Cobra AERO's world class single cylinder propulsion system. The A33N is purposely designed for aerospace applications, and it's quickly becoming the standard for Group 2 UAS.



- 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)
- Hardware, electronics and software all designed specifically for UAS applications
- Machined crankcase with integrated starter-generator
- Active cooling duct
- Integrated focal isolation mount
- Passed FAR33 Accelerated Durability Test
- Alternate A33 Engine configurations available upon request
- Parallel hybrid capabilities boost output when bursts of climb or sprint power are required

SPECIFICATIONS

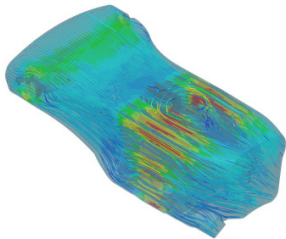
Engine Type:	Air-cooled 2-stroke single
Displacement:	33 cc (2.0 ci)
Mass:	3.15 kg (6.94 lbs) (Includes core engine, exhaust, ECU, fuel pump, injector, ignition, generator, harnesses)
Power Output:	2.2 kW (2.9 HP) at 8350 RPM
Fuel Consumption:	500 g/kW-hr (0.82 lb/hp-hr) cruise
Generator Output:	200W (400 W intermittent)
Fuel Type:	Gasoline 50:1 premix

SYSTEM INCLUDES

- Power4Flight IntelliJect ECU
- Currawong self-priming fuel pump
- All required EFI sensors and wire harnessing
 - CHT, MAT and Fuel pressure
 - Baro and MAP
 - Ignition module
- Fuel pressure accumulator
- Full induction and exhaust system
- Electric power generator with start capability
- Cooling duct with active control
- Optional IntelliGen PMU for starting, charging, and power augmentation capabilities
- Available NDAA-848 Compliant ECU

FEATURES

- Altitude compensation
- Cold start compensation
- Superior throttle response compared to carbureted engines
- Onboard data logging, maintenance tracking, and logbook
- 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





Date: April 10, 2025

A33N

Datasheet - Page2

240 Uran Street
Hillsdale, MI 49242



P: 517-437-9100



F: 517-437-9101



www.cobra-aero.com



A33N-AXS Performance
17x10 prop

kW

HP

