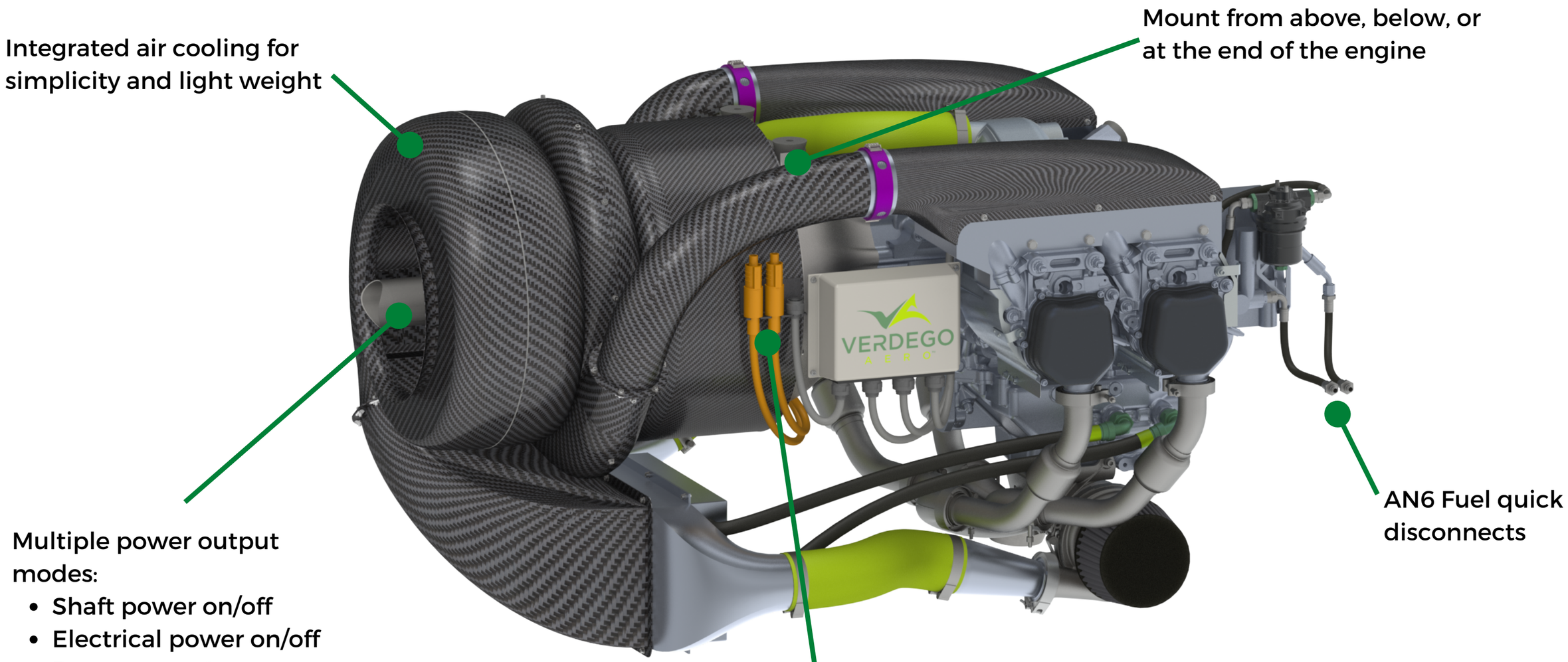
VERDEGO AERO

INTRODUCING THE

VH-3-185 HYBRID POWERPLANT

PATENTS PENDING

POWERING THE ELECTRIC FLIGHT REVOLUTION



Batteries alone can't meet the mission?

- 5-7X higher energy density than batteries
  - Transformational range while meeting energy reserve requirements
- Up to 12X faster refuel/recharge
  - More flights per day = more revenue
- No charging infrastructure required

Turbine options too loud or too thirsty?

- 40% better fuel economy for lower DOC and carbon emissions
- Available with noise mitigation below 70 dB at 100ft or less
- Built around a certified engine & air cooling, familiar aerospace technology

KEY FEATURES

- Primary power generation for hybrid-electric aircraft
- 600-1000+ Wh/kg Equivalent energy density
- **40%** better fuel economy than turbines, with less noise
- Uses Jet-A or biofuel substitutes = zero new infrastructure required
- Self-contained system includes engine, generator, inverter, and thermal management using air cooling
- 600V - 800V Output
- Series or parallel hybrid modes

VH-3-185

Quiet, Efficient, and Affordable Power for Electric Aircraft

Modular/Scalable - use 1 or 2 powerplants to meet total power requirements
Broadly Applicable - suitable for UAM eVTOL, eSTOL, eCTOL
Quiet - Much quieter than turbines and turbine-hybrids
Lowest Direct Operating Costs compared to turbine-hybrids and battery-electric
Flexible - Multiple potential operating modes using optional thru-shaft: mechanical shaft power on/off, electrical power on/off, burst power from battery to boost mechanical shaft power

SIMPLE, POWERFUL, RELIABLE
ON THE ROAD TO CERTIFICATION

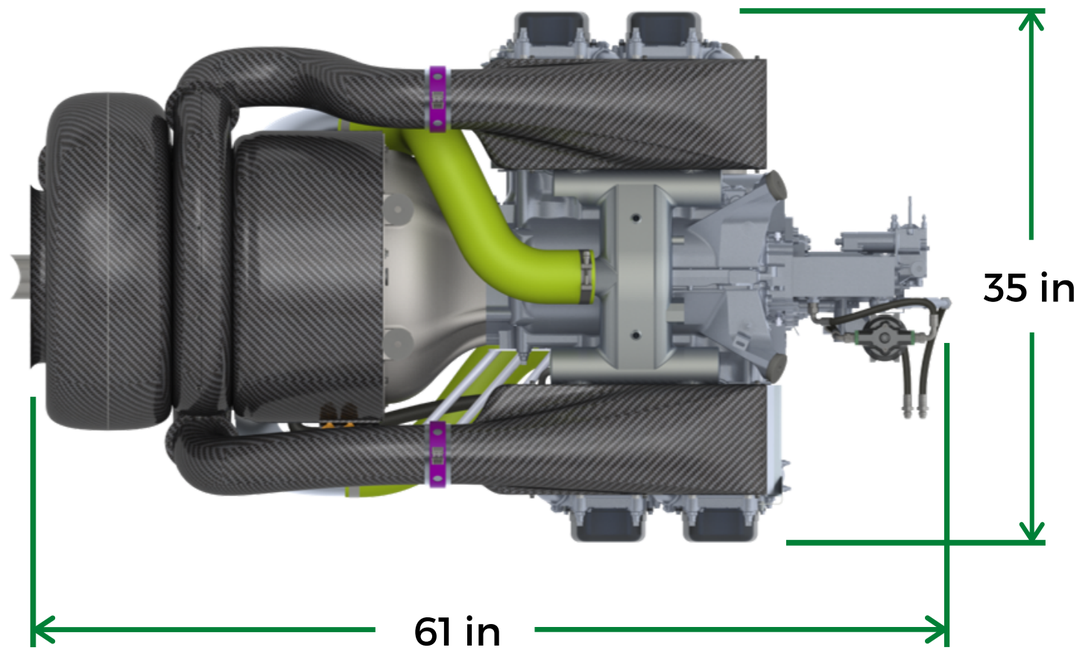
SPECIFICATIONS

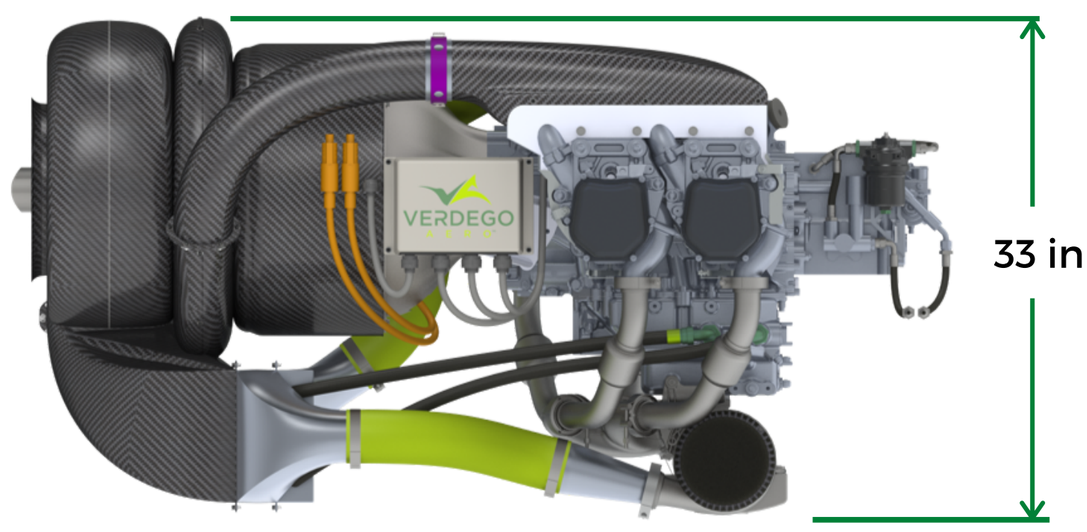
	SI Units	SAE Units
Max Continuous E-Power	185 kW	248 hp
Max Continuous Shaft Power	185 kW	248 hp
Max Burst Shaft Power*	370 kW	496 hp
Nominal system bus voltage	600 - 800V	600 - 800V
Specific Fuel Consumption	227 g/kWh	0.37 lb/hp-h
Ambient temperature range	-40 to 50C	-40 to 122F
Ceiling for full takeoff power	3050 m	10,000 ft
Certified ceiling	6100 m	20,000 ft
Dimensions (LxWxH)	155x90x84cm	61x35x33in
Mass, dry**	295 kg	650 lb

*Max burst shaft power depends upon battery configuration

**Dry mass includes engine, generator, inverter, and thermal systems

All specifications and performance metrics are preliminary and subject to change





PATENTS PENDING

VERDEGO AERO

1511 Aviation Center Parkway
MicaPlex Suite 220F
Daytona Beach, FL 32114
(386) 281-6727
info@verdegoaero.com

VerdeGo Aero has operational experience with thermal systems, battery integration, electronic interface, and noise mitigation, and we are able to provide complete systems solutions to meet all your mission requirements. Our expertise includes integration of propulsor and powerplant controls using modeling and simulation to support all design decisions.

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