



AST-160 JET ENGINE

Astro Power System's AST-160 Jet Engine is a radial flow turbojet designed for providing thrust to small high-speed UAVs and model jet aircraft. The designated system provides ease of operation, flexibility, and maintainability over other systems. Different engine parameters can be altered via touch LCD (GSU). Astro Power System's engines have undergone extensive redesign and testing in order to provide safe and reliable working engines with highest



quality standards for the satisfaction of customers. All engines, before delivery are subjected to test runs, for the said purpose, a specialized engine test bed measures and record all performance data automatically and the engine rotors are dynamically balanced and finely tuned. All manufacturing, assembly of mechanical parts and testing are performed in house in our workshop/Laboratory. In addition to that, the Electronics Control Unit (ECU) hardware and related software are also developed, manufactured, and tested in house.

CONTACT US

info@astropowersystems.ca
www.astropowersystems.ca
4550 Ebenezer Rd, Brampton,
ON Canada



Features

- Microprocessor based fully automatic ECU (Engine Control Unit)
- ECU (Electronic Fuel Controller) with touch LCD Programmable GSU
- High performance compressor and turbine
- No need for external lubrication system (lubricant is mixed with fuel)
- Kerosene start system makes it easy to start i.e., no need for compressed air or propane gas
- Telemetry output for data display to other sources (computer / laptop for instance)



Performance Specification

- Thrust: 160N
- Exhaust Gas Temperature (EGT): 550 – 750°C
- Compressor Type: Single Stage Radial
- Typical Fuel: Kerosene, Jet A-1, JP-4, JP-5, JP-8, Sustainable aviation fuel
- RPM: 32000 @ Idle, 125,000 @ Max
- Compressor Pressure Ratio: 3.1 @ Max RPM
- Turbine Type: Single stage Axial
- Lubrication: 5% Turbine Oil Mixed with Fuel
- Mass flow: 0.36 kg/s
- Fuel Consumption idle (ml/min): 150
- Fuel Consumption idle (ml/min): 565
- Engine Diameter: 113 mm
- Length: 245 mm
- Engine Weight: 1.7 kg
- Maintenance interval: 25 hours
- Ignition Type: Kerosene (Internal)

