NW-88 HEAVY-FUEL ENGINE

Purpose-Built to Accommodate Aircraft in the 75 to 150 lb. Vehicle Class

Where Precision and Reliability Soar!

From single components to entire propulsion systems – Our main focus is in engines, modular components and support solutions for any UAV or unmanned system.
NWUAV purpose-built NW-88 multi-fuel engine is designed, developed and built for unmanned aircraft systems with larger payload requirements, low altitude, and long endurance aircraft.

The NW-88 is the most efficient and configurable UAV engine on the commercial market.

Purpose-built to handle aircraft from 34 to 68 kg (75 to 150 lbs).

- Built for Reliability
- Based on the Combat-proven NW-44
- Built Specifically for Unmanned Applications
- Scalable for Use in a Broad Range of Aircraft
- Logistic Fuels Compatible
- Best Power-To-Weight Ratio
  - Larger Payloads
  - Higher Climb Rates
  - Faster Cruise Speeds
- Easy Maintenance
- Approved for Export EAR99
- Technical Support Included
- Telemetry Trend Monitoring
- Designed for STANAG 4703/AEP-83

*depending on mission requirements and aircraft configuration

### SPECIFICATIONS

**NW-88 EFI**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Total Weight* (see below)</td>
<td>7400 ± 200 grams</td>
</tr>
<tr>
<td>Displacement</td>
<td>88 cc</td>
</tr>
<tr>
<td>Maximum Continuous Speed</td>
<td>7500 rpm</td>
</tr>
<tr>
<td>Power Rating at 7250 RPM</td>
<td>7.2 hp</td>
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<tr>
<td>BSFC at Cruise 5000 RPM at Sea Level</td>
<td>0.65-0.75 lb/hp-hr</td>
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<tr>
<td>Ignition</td>
<td>Twin 25kv Capacitor Discharge Ignition (CDI) per cylinder</td>
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<tr>
<td>Cooling</td>
<td>Air with Active Cylinder Head Temperature (AQT) Control</td>
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<tr>
<td>Generator Regulator</td>
<td>6/12/21 or 28 VDC, 280-Watts continuous (600-Watts optional) at typical flight conditions</td>
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<tr>
<td>Generator</td>
<td>On-Shaft Permanent Magnet Alternator</td>
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<tr>
<td>Fuel System</td>
<td>Full Authority Digital Engine Controller with Electronic Fuel Injection</td>
</tr>
<tr>
<td>Fuel Type</td>
<td>Non-ethanol 93-100 octane gasoline (R+M)/2, Jet-A, JP-5, JP-8, TS-1</td>
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<tr>
<td>ECU Data Storage</td>
<td>1,000 hours at 1Hz Recording Rate</td>
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<tr>
<td>TBO (Estimate)</td>
<td>400-500 hours</td>
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### ADDITIONAL FEATURES

- Twin-cylinder engine
- RPM hold capable
- Dual ignition (per cylinder)
- Dual piston rings
- Automatic altitude compensation
- Telemetry:
  - Speed
  - Fuel consumption
  - Throttle position
  - Cylinder temperature
  - Intake air temperature
- Easy cold start
- CAN communication
- Lightweight quiet acoustic muffler
- Interfaces with popular autopilots
- Fuel injection
- Standard 280-Watt direct drive generator with a 6/12/28 volt Generator Control Unit (GCU)
- Optional 600-Watt direct drive generator with a 12/28-48 volt Generator Control Unit (GCU)
- Conformal design mitigates unwanted parasitic drag, which increases net efficiency
- MANUFACTURED IN THE USA

Notes:
- Actual performance will vary depending on PMU configuration, application, propeller, fuel, oil, environmental conditions and type of operation.
- * Total weight with propeller and interface harness.