

NW-230 UAV Multi-fuel Engine

36,000 DA



ENTERPRISE STANDARD FOR GROUP 3 HEAVY-LIFT PROPULSION REDEFINING THE HEAVY-PAYLOAD ENDURANCE ENVELOPE

The NW-230 is a purpose-built, high-displacement multi-fuel engine engineered for the most demanding 90 kg to 160 kg (198–352 lbs) UAS platforms. Positioned as the most efficient and configurable propulsion system in the commercial sector, the NW-230 leverages the combat-proven architecture of the NW-44 and NW-88 to provide an industrial-grade solution for long-endurance, high-payload mission profiles.

01. Classification: Group 3 UAS Heavy-Payload Engine
02. Origin: Made in the USA | Export-Approved EAR99 | AS9100-Compliant
03. Standard: Enterprise-Grade / High-Altitude Long-Endurance (HALE)

MILITARY PROVEN PROPULSION SOLUTIONS!





Made in the USA
EAR99 Approved

NW-230 UAV HFE - ENGINEERED FOR OPERATIONAL AVAILABILITY

The NW-230 is designed for high **Time Between Overhaul (TBO) 500+ hours** and simplified field-level maintenance. This is not a modified engine; it is a dedicated aerospace component supported by full technical integration services, ensuring that your Group 3 fleet remains mission-ready with minimal downtime.

01. TECHNICAL DOMINANCE & PERFORMANCE METRICS

- **Superior Power-to-Weight Ratio:** Engineered to maximize mission utility, the NW-230 enables larger sensor payloads, aggressive climb rates, and high-speed cruise dashes without compromising fuel economy.
- **Unrivalled High-Altitude Capability:** Validated for operation up to 36,000 ft Density Altitude (DA), providing a strategic advantage in high-mountain reconnaissance and high-altitude long-endurance (HALE) applications.
- **Heavy-Fuel Optimization:** Full EFI integration ensures seamless compatibility with global logistic fuels (JP-5, JP-8, Jet-A), eliminating the safety risks and supply-chain complexities of gasoline.
- **Predictive Maintenance Ecosystem:** Features integrated Telemetry Trend Monitoring, allowing fleet managers to transition from reactive repairs to data-driven, predictive maintenance cycles.

02. NW-230 CORE SPECIFICATIONS

PARAMETER	SPECIFICATION
Engine Type	Two-stroke, Multi-Fuel Industrial Core
Weight ¹	10 kg ± 200 grams
Displacement	230 cc
Bore / Stroke	54 mm / 50 mm
Peak Torque	~15 ft/lbs
Max RPM	7500 rpm
HP Range ²	15-18 hp
BSFC ³	Call for Data
Ignition	Shielded Twin 25kv CDI (Capacitive Discharge Ignition) per Cylinder
On-Board Start	Available
Cooling	Air with ACHT (Active Cylinder Head Temperature Control)
Fuel Delivery	FADEC (Full Authority Digital Engine Control), EFI (Electronic Fuel Injection)

NOTE: Actual performance will vary depending on PMU configuration, application, propeller, fuel type, oil, environmental conditions, type of operation, direction of rotation, generator losses, and cowling configuration.
¹Weight does not include Generator, Generator Controller/Rectifier, or Propeller. Includes: ECU, Muffler, Engine Mount, ACHT, and Engine Harness. | ²Depending on propeller/RPM. | ³Fuel is subject to regional and seasonal variations. The user is responsible for testing, validating, and defining operational limits with their local gasoline source.

Engine application is dependent on airframe factors including: Aerodynamics, propeller, and operational concept. Please contact NWUAV for guidance.

03. ENTERPRISE FEATURES

- **High-Altitude Optimization:** Specialized mapping for DA ensures reliable combustion and power delivery in extreme thin-air environments.
- **Telemetry & Trend Monitoring:** Integrated digital backbone allows for real-time health monitoring and predictive maintenance, reducing unscheduled ground time.
- **Maximum Payload Efficiency:** Boasting the industry's best power-to-weight ratio in its class, the NW-230 enables faster cruise speeds and higher climb rates under full load.
- **Logistic Fuel Readiness:** Fully compatible with JP-5, JP-8, Jet-A, and non-ethanol gasoline (R+M)/2³ (93-100 Octane), facilitating seamless integration into existing military and commercial fuel chains.

04. OPERATIONAL READINESS

- **Scalable Integration:** Designed to be the "Gold Standard" for a broad range of airframes, from tactical surveillance to heavy-lift cargo delivery.
- **Full Technical Support:** Includes comprehensive integration documentation and direct access to US-based engineering support.
- **Fleet repeatability:** AS9100-compliant manufacturing ensures every engine meets identical performance benchmarks for fleet-wide consistency.

05. THE NWUAV ADVANTAGE

- **The NW-230 is the most configurable UAV engine on the commercial market.** It represents a shift from "propulsion as a component" to "propulsion as a managed system." By leveraging a combat-proven lineage, it provides the lowest risk-profile for high-value Group 3 UAS programs.



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