

EX INTERNATIONAL · GP ENGINE

UAV Propulsion Systems

*Engineered for Long-Endurance Missions.
Built for Mission-Critical Reliability.*



38–230 cc

Engine displacement range

EFI

Electronic fuel injection

>99%

Manufacturing pass rate

10+ yrs

Production track record

Two brands. One complete propulsion solution.



GP — Great Power Engine

Founded 2012 · Taiwan

Core engine R&D and manufacturing for UAV and model aircraft. Over a decade of engineering know-how, partnered with Taiwan's mature precision-machining supply chain.

- ✓ Recognized in North American & European markets
- ✓ High power-density gasoline engines
- ✓ Proven long-duration operating stability



EX International

Subsidiary of GP · System Integration

Complete propulsion solutions — from engine, to ECU, to fuel delivery and sensor integration. Optimized at the system level, not just at the part level.

- ✓ Electronic Fuel Injection (EFI) systems
- ✓ ECU & sensor calibration
- ✓ Mission-tuned, ready-to-fly delivery



The real challenge isn't peak power. It's 40 hours of stability.

40h+

MISSION ENDURANCE

In modern UAV operations, mission success is rarely decided by peak output. It's decided by an engine's ability to run continuously, predictably, and at high load — for hours, not minutes.

01

Long Endurance

Typical missions: 2–6 hours; advanced: 40+ hours

02

High-Load Cruise

70%–100% throttle for sustained periods

03

Environmental Range

Wide temperature & altitude variation

04

Field Serviceability

Fast on-site maintenance and turnaround

05

Predictable Combustion

Stable, repeatable performance every flight



Full engine lineup, sized to your mission.

EX38
EFI UAV Engine



Displacement	38cc	Power	5HP
Total Weight	1935g	RPM Range with starter-alternator	2200-8000
ECU Voltage	16.8-28V	Power Draw	44.2W
Temperature Range	230°C	Starter-Alternator configurable Battery	LiPo
Recommended Propeller	20x8, 20x9, 20x10		

EX76
EFI UAV Engine



Displacement	76cc	Power	8HP
Total Weight	2890g	RPM Range with starter-alternator	2000-7000
ECU Voltage	16.8-28V	Power Draw	44.2W
Temperature Range	230°C	Starter-Alternator configurable Battery	LiPo
Recommended Propeller	23x10, 24x8, 24x9, 24x10		

EX123
EFI UAV Engine



Displacement	123cc	Power	12HP
Total Weight	3965g	RPM Range with starter-alternator	2000-7000
ECU Voltage	16.8-28V	Power Draw	44.2W
Temperature Range	230°C	Starter-Alternator configurable Battery	LiPo
Recommended Propeller	27x12, 28x10, 28x12		

EX230
EFI UAV Engine



Displacement	230cc	Power	23HP
Total Weight	5230g	RPM Range with starter-alternator	2000-6200
ECU Voltage	16.8-28V	Power Draw	44.2W
Temperature Range	230°C	Starter-Alternator configurable Battery	LiPo
Recommended Propeller	33x13, 34x12		

EX61
EFI UAV Engine



Displacement	61cc	Power	6.5HP
Total Weight	2570g	RPM Range with starter-alternator	2000-7000
ECU Voltage	16.8-28V	Power Draw	44.2W
Temperature Range	230°C	Starter-Alternator configurable Battery	LiPo
Recommended Propeller	24x8, 24x9, 24x10		

EX88
EFI UAV Engine



Displacement	88cc	Power	10HP
Total Weight	3635g	RPM Range with starter-alternator	2000-7000
ECU Voltage	16.8-28V	Power Draw	44.2W
Temperature Range	230°C	Starter-Alternator configurable Battery	LiPo
Recommended Propeller	26x10, 27x10		

EX178
EFI UAV Engine



Displacement	178cc	Power	21.5HP
Total Weight	5630g	RPM Range with starter-alternator	2000-6600
ECU Voltage	16.8-28V	Power Draw	44.2W
Temperature Range	230°C	Starter-Alternator configurable Battery	LiPo
Recommended Propeller	30x13, 32x10, 32x11		

Design



Appropriate weight of engine gives perfectly balance for your aircraft.



Built for sustained output, not just peak numbers.



High Power Density

01

Sustained, repeatable output within strict UAV weight budgets — designed for long-flight platforms.



Air-Cooled 2-Stroke

02

Mechanically simple. Fewer parts, faster service, easier field deployment.



Long-Run Optimized

03

Engineered for stable mid-to-high load over many hours, not for short bursts of extreme output.



Manufacturing Consistency

04

Mature supply chain plus tight process control deliver low batch variation, engine after engine.

EFI — precise, adaptive, mission-stable combustion.

Carburetor vs. EFI

Why we moved to electronic fuel injection

CARBURETOR

Manual mixture tuning

Drift with temp/altitude

Operator-dependent

Limited diagnostics

EX EFI

Closed-loop AFR control

Auto compensation

Repeatable & predictable

Real-time data logging



Precise AFR Control

Closed-loop mixture management for every cylinder cycle.



Auto Environmental Comp.

Compensates temperature & altitude — no manual re-tuning.



Long-Run Stability

Holds combustion quality across 40+ hour missions.

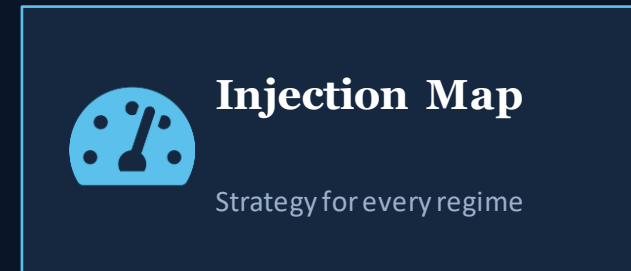
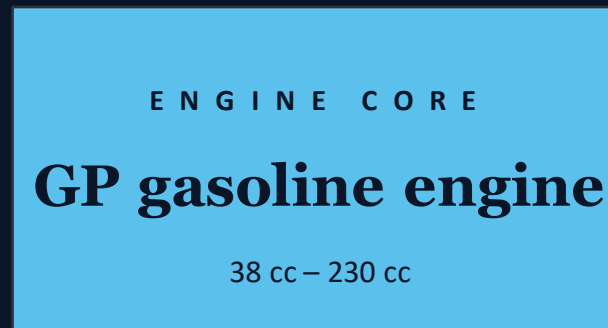
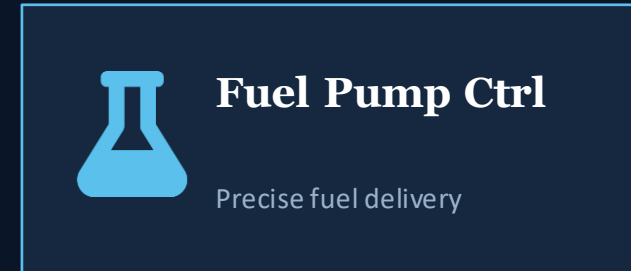


O₂ Sensor Ready

Optional λ -sensor tuning for advanced calibration.

We deliver a controlled combustion system, not just a part.

ECU · Fuel Pump Control · Injection Strategy · Sensor Integration



“You are not buying a part. You are buying a controlled combustion system.”

Every engine flies a mission before it leaves us.



1. Performance Test

Full bench performance characterization for every unit.



2. Propeller Tuning

Calibrated to your actual propeller load — not a generic curve.



3. Mission Validation

Stability test under realistic flight conditions.

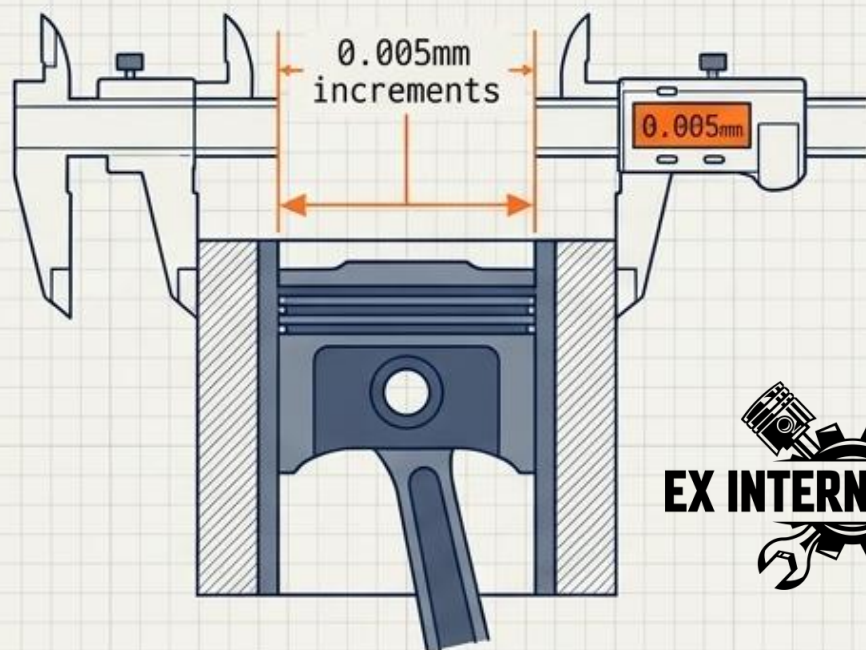


4. Data Package

Full test record delivered with every engine.

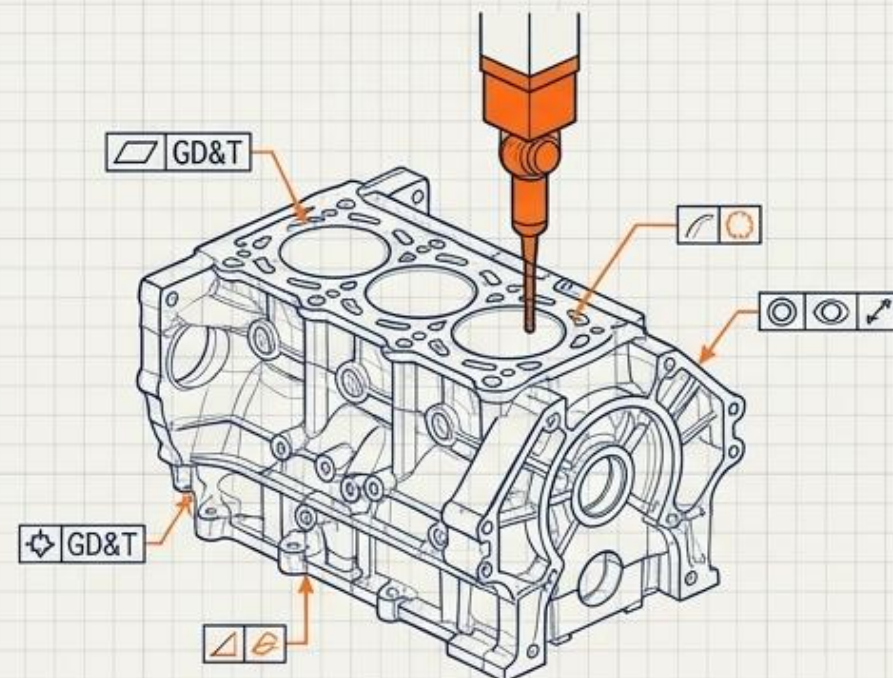
When the engine arrives, it isn't "brand new." It's already tuned, validated, and mission-ready.

The A/B/C Matching Protocol.



- Pistons and cylinders are graded into A, B, and C classifications.
- Tolerance increments of exactly 0.005mm.
- Strict 1-to-1 matching (A-to-A, B-to-B) ensures optimized airtightness, minimized friction, and extended operational lifespan.

Sub-Millimeter Verification



- CMM full-dimension testing on every crankcase.
- Strict 0.05mm length tolerance on crankshafts to prevent excess wear.
- Dial indicator testing on propeller hubs to guarantee absolute flatness and concentricity.
- Airtightness pressure testing on all cylinders to eliminate casting micro-pores.

100% inspection. Aerospace-grade materials.



CMM Crankcase

3-D coordinate measurement on every crankcase



Cylinder Air-Tightness

Pressure test — confirms no porosity defects



Crankshaft Balance

Coaxiality, eccentricity, rotational balance



Full Traceability

Part No. + Work Order from intake to ship

Aerospace-grade material system

(Same material class used by Rotax and other aviation-grade engine systems)

AC9A

High-silicon Al alloy

Pistons — high thermal stability

ADC12

High-strength Al alloy

Crankcase — strength + machinability

Ductile Iron

Spheroidal cast iron

Piston rings — wear & sealing

CERAMIC

Ceramic-coated bore

Cylinder — light, wear-resistant

Validated across regions, climates, and missions.



Global Player

Cross-regional operating capability

Our customers are not concentrated in a single market. GP and EX engines are deployed across North America, Europe, the Middle East, Asia-Pacific, and Australia. Each region brings different climate conditions, operating profiles, and mission requirements — and our engines have been validated in real operations in all of them.

NORTH AMERICA

USA · Canada

EUROPE

Multiple EU markets

MIDDLE EAST

Hot-climate validated

ASIA-PACIFIC

Including domestic Taiwan

AUSTRALIA

Long-distance ops



Built for Enterprise Scale.

**10,000+ Units / Year
Production Capacity**

Dynamic Inventory Control.

ERP-driven scheduling, strict FIFO (First-In-First-Out) material handling, and safety stock mechanisms.

Flexible Delivery Architecture.

Capable of supporting large-scale centralized shipments or phased, batch-delivery strategies for continuous enterprise production lines.

Operational Readiness.

Mid-to-long term material planning ensures immunity against supply chain shocks for high-volume contracts.

