GeoDrones long endurance gasoline generator hybrid quadcopter equipped with gasoline-electric hybrid power system. It's made of very sturdy carbon fiber material and its arms are foldable, which saves more space and makes this drone convenient for storage and transportation.

This quadcopter is equipped with Ardupilot flight controller. Long range telemetry datalink and radio control to make this drone very reliable and very safe.

GeoDrones long endurance gasoline generator hybrid quadcopter is equipped with highly efficient power system, including 4x XRotor Pro X8 Motor & ESC Combo. This power system ensures high loading capacity and a very stable flight performance. It has 6kg lifting capacity on each arm and has an 2500w gasoline generator that offers 48V output with plenty of electrical current to the 4 very high efficiency motors to ensure a long flight time. Max flight time approaches about 4+ hours without payload. Power system has fail-safe design, a 12S Lipo battery is installed on board, offering emergency back-up power and supporting quick climbing and maneuvering task.

Maintenance is necessary for gasoline generator to keep its high performance. The maintenance cycle is 50-75 working hours depends on different working conditions.

As a long endurance and high-quality flying platform, it opens a wide range of new commercial possibilities for businesses such as inspection, search and rescue, power line inspection and survey industries etc.

(FLIR/Zoom camera application for long flight time inspection case)
Specification

- **Diagonal Wheelbase:** 1400mm
- **Frame Arm Length:** 345mm
- **Dimensions:** 1000x1000x530mm (arms unfolded, propellers removed)  
  675x650x530mm (arms folded)
- **Flight Controller:** Ardupilot Pixhawk
- **Remote controller:** DA16 or equivalence
- **Total Weight (no fuel):** 13.2kg
- **Standard Takeoff Weight:** 21 kg
- **Max Takeoff weight:** 24.8 kg (at sea level)
- **Max Thrust-weight Ratio:** 1.71 (takeoff weight 23.8 kg)
- **Hybrid Hovering Power consumption:** 2450W, ~2L fuel for 1 hour (takeoff weight 21 kg)
- **Hovering Time:** 4+ hours (Without payload, Full fuel, Wind speed less than 3m/s)
- **Max Flying Speed:** 15m/s
- **Max Service Ceiling Above Sea Level:** 2000 m
- **Operating Temperature:** 0°C to 40°C
- **Maintenance cycle:** 50-75 working hours, depends on different working condition.

(payload not included in system)