



PULSE P19

Light Military Multi Mission Aircraft.

Detect. Decide. Defend.

PULSE P19 is the **first aircraft designed from inception to dominate the low-altitude battlespace with optional piloting capability**. As a multi-role platform, it is engineered to execute Counter-UxS, ISR/EW, and Manned-Unmanned Teaming (MUM-T) operations with speed, precision, and adaptability. The aircraft combines tactical agility, exceptional endurance, advanced self-protection, a high-performance AESA radar, a large-format EO/IR sensor suite, and precision effectors (C-UAS, ALE, LMS) in a single platform. This unique combination of capabilities enables the system to **detect, identify, and defeat emerging threats with speed and precision**, even in complex and contested operational environments. Where responsibility,

experience, and critical decision-making matter most, control remains with the human operator.

Equipped with a digital, networked mission autopilot for tactical maneuvering and sensor-driven flight guidance, PULSE P19 delivers precise, consistent, and resilient operations while reducing workload, enhancing safety, and providing a clear pathway from crewed to future unmanned operations. Quantum Systems delivers PULSE P19 as a **fully integrated operational ecosystem from a single source**: the aircraft, open modular avionics, the MOSAIC UxS software suite, payload integration and connectivity, C-UAS effectors, and mission training enabled by flight simulators and in-flight simulation.



Technical Specifications

Performance

Maximum cruising speed (6,100 m / 20,000 ft, MCP)	537 km/h (290 kts)
Maximum permissible operating speed (0–4,000 m / 13,100 ft)	556 km/h (300 kts)
Maximum Mach number (4,000 m / 13,100 ft – 8,000 m / 26,200 ft)	Mach 0.58
Service ceiling	7,620 m (25,000 ft)
Take-off distance (ISA, sea level)	< 550 m (1,800 ft)
Landing distance (ISA, sea level)	< 450 m (1,470 ft)
Load factor limits	+7.0 / -4.0 g

Payload flexibility

- + Fuselage-mounted radar system
- + Retractable EO/IR gimbal up to 22"
- + 6 × wing stations, standard NATO load points (14")
 - 4 × 500 lb-class, 'wet' (with fuel supply)
 - 2 × 250 lb-class
 - 2 × optional wing tip station



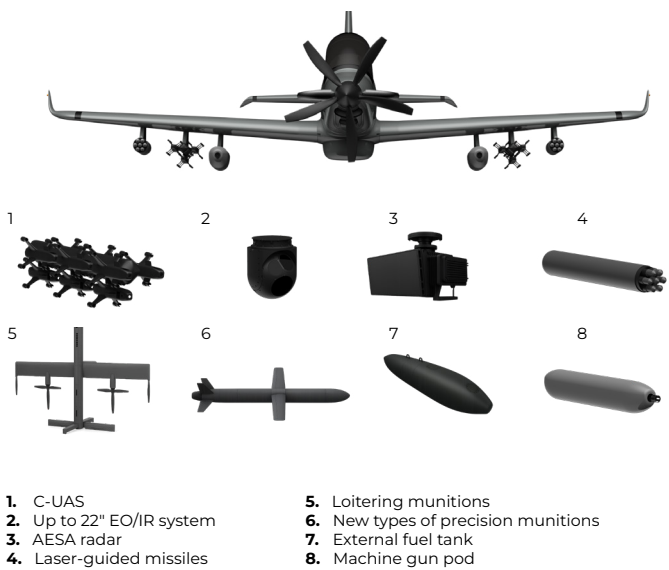
Mass, Fuel & Payload

Maximum take-off mass (aerobatic)	2,500 kg (5,512 lb)
Maximum take-off mass (utility)	3,200 kg (7,055 lb)
Maximum take-off mass (military)	4,200 kg (9,259 lb)
Basic empty mass, (excluding ejection seats)	1,700 kg (3,748 lb)
Payload (internal + external)	2,500 kg (5,512 lb)

Usable internal fuel	1,400 L (307 gal)
Total fuel volume (internal and external fuel)	2,300 L (608 gal)
Maximum permissible fuel load (aerobatics)	460 L (121 gal)

Endurance on internal fuel	11+ h
Maximum endurance (internal and external fuel)	18+ h

Range on internal fuel	2,200+ km (1,200+ NM)
Maximum range (internal and external fuel)	3,700+ km (2,000+ NM)



Specifications are based on preliminary data and are subject to change.

