



CGT50 NEXT GENERATION HYBRID VTOL UAV



The **CGT50-SLT** is a 4.71 m wingspan T-Tail UAV. It uses electric powered motors for takeoff and landing and does not require a runway or catapult. It is a composite airframe with 5 kg payload capacity, powered by a petrol engine. The low fuel consumption enables a safe endurance of 6 hours. The **CGT50-SLT** can takeoff from a table and land on a 5x5 m surface with high accuracy.

The **CGT50-SLT** has a 55 kg MTOW (including payload). It can be operated by just two people. Using A-techSYN's **Avionics Mini** Flight Control System, flight missions are carried out **fully autonomous!**

The **CGT50-SLT** uses separate communication systems for datalink and videolink. The systems are operating at different frequencies to increase redundancy. It is also possible to add Satellite communication.

The videolink uses IP communication and 128 bit SSL encryption in order to secure the data transferred. Video and data is IP and may be broadcasted if desired.



Avionics Mini | Flight Control System

The **CGT50-SLT** comes with 350W or 500W alternator build in. The alternator produces 200W of excess energy to be used by payloads which is sufficient for almost all applications of this size. It also has a backup battery that ensures a safe flight for sixty minutes in case of an alternator failure.



The **CGT50-SLT** uses Avionics Mini Flight Control System which is a double redundant flight controller.

Avionics Mini is a state-of-art technology and has several safety features build in. It packs the power management, flight control and suitable connector interfaces for all necessary avionic components in a single unit. All servos, EFI module, communication links, GPS antennas, pitot tubes etc. are connected to this single unit making maintenance and fault detection easier. **Avionics Mini** is %100 compatible with **A-techSYN Ground Control Station** and can be customized to meet customer specific requirements.



CGT50-VTOL		PERFORMANCE SPECIFICATIONS		OTHER SPECIFICATIONS	
Material	Composites	Endurance	6 hours	Flight Controller	Avionics Mini
Takeoff / Landing	Vertical (SLT)	C2 Range	80 - 200 km	Redundancy	Double Redundant
Wingspan	4.71 m	Maximum Altitude	18.000 feet MSL	Autonomy	Fully Autonomous (Takeoff - Mission - Landing)
MTOW	55 kg	Maximum Speed	58 knot	Fuel Tank	19 liters
Payload	5 kg	STALL Speed	38 knot	SATCOM	Optional