

TJ20U TURBOJET ENGINE

Small turbojet engine designed for UAVs, UCAVs,
target drones and reconnaissance drones.



Main parameters

Thrust: take - off (max. 5 min.)	210 N	47.2 lbf
Verified longitudinal overload	+/- 20 G	+/- 20 G
Operating altitude	0 - 6000 m	0 - 20,000 ft
Flight speed range	< Mach 0.6	< Mach 0.6

Dimensions and weight

Engine length	316 mm	12.44 in
Outside diameter	121 mm	4.76 in
Weight	2.1 kg	4.37 lb

Other data

Power supply	12 V	12 V
Specific fuel consumption	≤ 0.165 kg/Nh (SFC at max. thrust)	≤ 1.47 lb/lbf/hr (SFC at max. thrust)
Fuel consumption min.	126.6 ml /min. (idle)	4.26 oz/min (idle)
Fuel consumption max.	650.0 ml/min. (max. thrust)	21.98 oz/min
Fuel	JET A-1 or equivalent with 3 % turbine oil with 3 % turbine oil	JET A-1 or equivalent with 3 % turbine oil with 3 % turbine oil
Oil	MIL-L-23699	MIL-L-23699

Main features

- Innovated engine for easy buildup in UAV applications.
- Complete accessories including electronics, pump, electric valves, spark plug and sensors integrated in the engine.
- Easy and fast kerosene starting.
- Electric starting, one fuel supply.
- For operation it is sufficient to connect a battery (3sLiPo – 2200 mAh) and to supply a mixture of fuel with 3 % turbine oil.
- Maintenance and service in the manufacturing plant.
- Verified longitudinal overload +/- 20 G enabling take off launcher
- Excellent thrust-to-weight ratio.

