

LHTEC T800-4N

Power for the AgustaWestland Super Lynx 300, Future Lynx, ShinMaywa US-2, future applications and technology demonstration

Having proven its class-leading performance and reliability during the development the T800/CTS800 family has already secured a number of production applications. The commercially-certified CTS800-4N featuring a speed-reduction gearbox, powers the latest generation of the versatile AgustaWestland Lynx family, the Super Lynx 300. Ordered by the armed forces of Malaysia, Oman, South Africa and Thailand, the Super Lynx benefits from a 35% increase in installed power delivered by the CTS800. This substantially enhances its 'hot and high' performance. The UK MoD has selected the CTS800-4N engine to power their fleet of Future Lynx helicopters. The CTS800 is a natural engine upgrade for existing Lynx fleets.

The CTS800 also powers the revolutionary boundary layer control (BLC) system on the ShinMaywa US-2 amphibious search and rescue aircraft. The vertically oriented CTS800-4K engine installation utilized in the US-2 highlights the potential of the T800/CTS800 family to meet a wide range of innovative power generation requirements.

The T800/CTS800 is certified for engine operation at altitudes of up to 35,000 ft., further demonstrating its suitability for high altitude applications.

The T800 has been flight tested in a large number of additional applications, including the AgustaWestland A129 Mangusta, Bell UH-1H Huey, Eurocopter AS.365 Dauphin, AS.565 Panther and the HAL Dhruv Advanced Light Helicopter. Sikorsky selected the T800 engine to power its X-2 rotorcraft technology demonstrator aircraft.

- **Class-leading high-technology engine family spanning 1,360 - 1,700 shp**
- **CTS800-powered AgustaWestland Super Lynx ordered by four nations now in service**
- **Selected to power the UK MoD's Future Lynx fleet**
- **Offered for a range of intermediate-twin, UAV and airborne power generation applications**



T800-4N



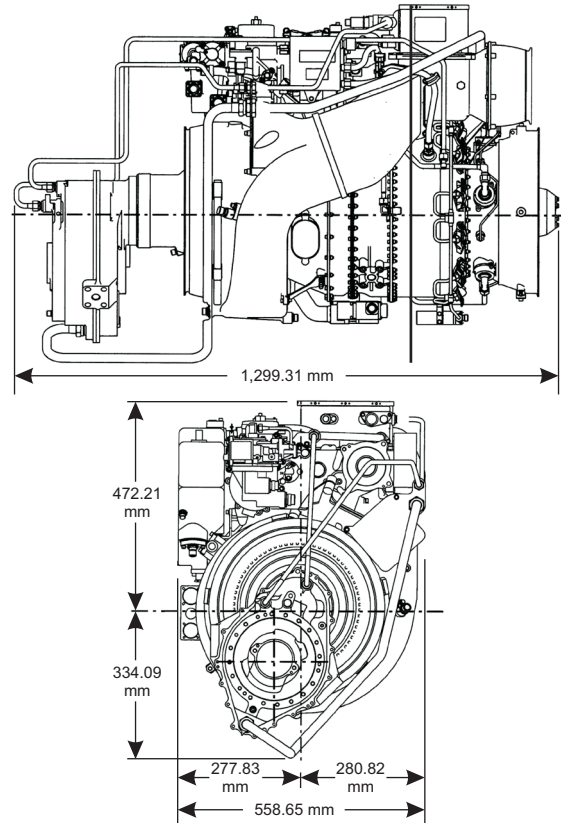
Basic engine specifications

T800	4N
Weight	408 lb
Power / weight ratio	3.26 lb/shp
Airflow	7.22 lb/sec
Pressure ratio	14.6:1
Design speeds @ 100% rpm	
Power output shaft	6,402 rpm
Gas producer rotor	44,850 rpm
Power turbine rotor	23,000 rpm
Fuels	JP-4, JP-5, JP-8
Oils	MIL-L-7808, MIL-L-23699

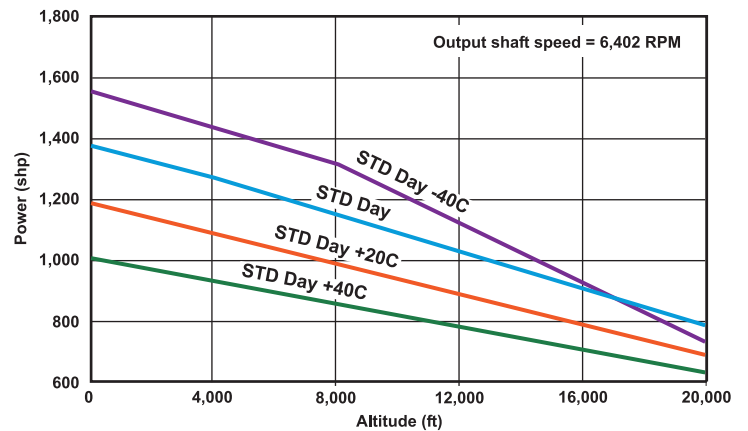
Performance

Sea level static rating	Minimum thermodynamic shaft horsepower	Sfc lb/shp-hr (max)
CTS800-4N		
30-second OEI	1611	0.462
2-minute OEI	1483	0.483
Continuous OEI	1329	0.469
Take-off (5 minute)	1329	0.469
Max continuous	1234	0.474
4000 feet, 95°F, static		
30-second OEI	1235	0.467
2-minute OEI	1115	0.476
Continuous OEI	997	0.481
Take-off (5 minute)	997	0.481
Max continuous	917	0.487

Installation design



Shaft horsepower at takeoff



Fuel flow at takeoff

