

LIGHT HELICOPTER TURBINE ENGINE COMPANY Honeywell A Partnership Rolls-Royce

# **LHTER CTSSOO** FLY FURTHER, FASTER AND MORE EFFICIENTLY WITH THE CTS800 ENGINE.

## PROVIDING OPERATORS WITH FLEXIBLE MISSION CAPABILITIES THROUGH EXTREMELY LOW FUEL CONSUMPTION IN A SMALL, LIGHTWEIGHT, HIGH POWER DENSITY PACKAGE.

The LHTEC CTS800 offers helicopter operators the power to perform, no matter the mission. The CTS800 enables longer time on station, outstanding hot and high performance and reliability in even the most challenging operational environments.

Designed for the US Army Comanche program by LHTEC, a 50:50 partnership with two of the industry's leading engine manufacturers, Honeywell and Rolls-Royce, the CTS800 has been proven in service since 2004. Powering a wide range of helicopters including the Super Lynx 300, AW159 Wildcat, T129 and, most recently announced, the new Turkish Light Utility Helicopter (TLUH), the CTS800 provides low fuel consumption, small footprint and high power to weight ratio. Add to this an extremely competitive life-cycle cost and one can see why the CTS800 is such an attractive power plant, especially for demanding military applications.

Featuring a modular design, the engine combines an advanced technology twin spool compressor, annular combustor, and four stage turbine. It makes operating in the world's most challenging environments easy thanks to the integrated Inlet Particle Separator. Combine this with a fully redundant, dual channel Full Authority Digital Engine Control (FADEC) system and the CTS800 is one of the safest helicopter engines in operation today.

The modular design of the engine enables maintenance to be completed quickly and easily. Amazingly only six tools are required to perform all CTS800 O-level maintenance. This modular design combined with the on-condition maintenance philosophy provides a low direct maintenance cost as well as low operating costs per flying hour and significantly reduces the through-life maintenance cost of the engine.



Providing a low risk, technical solution to the unique challenges faced in the theatre of operation, and proven in service with over a dozen Ministries of Defense worldwide, the engine makes it possible to carry more, fly higher even on hot days, and consume less fuel. With more than 300,000 in-service flight hours the CTS800 can be relied upon to perform - whatever the mission demands.





#### Proven in Service

In service with operators since 2004

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High power to weight ratio



Low maintenance costs



#### +300,000 Flight Hours

More than 300,000 in-service flight hours



#### 50:50 Partnership Honeywell and Rolls-Royce

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#### **Durability**

Locating majority of LRUs on upper region of engine mitigates risk of damage proven one of the highest MTUR's in a desert environment



### Substantially enhanced hot & high capability



Low Fuel Consumption

Specification	CTS800-4	CTS800-5*
Power shp (kW)	1,362 (1,015)	1,600 (1,193)
Pressure ratio	14:1	14:1
Length in (m)	33.9 (0.86)	33.9 (0.86)
Diameter in (m)	22.1 (0.56)	22.1 (0.56)
Basic weight lb (Kg)	375 (170)	375 (170)
Compressor	2CF	2CF
Turbine	2HP, 2PT	2HP, 2PT
Applications	Shinmaywa US-2 BLC, Leonardo Super Lynx, Leonardo	

Shinmaywa US-2 BLC, Leonardo Super Lynx, Leonardo Lynx MK9A, Leonardo AW159, ATAK Team T129, Sikorsky X-2 demonstrator, Turkish Light Utility Helicopter



The CTS800 lead the fleet engines have accumulated over 2,500 hours in service, of which over 1,700 was in a dusty desert environment. The engines experienced no shop visits or significant maintenances beyond lined or scheduled.

\* Not yet certified

#### Light Helicopter Turbine Engine Company

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For more information visit: aerospace.honeywell.com/CTS800

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