



#### **U.S.A**

Polaris Propulsion Labs Inc.  
261 NE 1st Street - 5th Floor  
Miami FL 33132  
Tel. 1-305-424-1311

Polaris Propulsion Labs Inc.  
250 East Drive  
Melbourne FL 32904  
Tel. 1-321-837-9211

#### **ASIA**

Polaris Asia Ltda.  
Unit 6D, Ritz Plaza 122 Austin Road  
Tsim Sha Tsui Kowloon, Hong Kong  
Tel. 852-2302-0462

#### **LATIN AMERICA**

São José dos Campos  
Avenida Shishima Hifumi, 2911  
Parque Tecnológico UNIVAP - Módulo 101  
Urbanova - São José dos Campos / SP CEP: 12244-000  
Tel. 55-12-3911-5222

# TJ-200

## Small Turbojet Engine



**Polaris**



# TJ-200 Description



TJ-200 was especially designed to be used in rockets, cruise missiles or high performance UAVs requiring a small compact engine (the TJ-200 is only 160 mm in diameter and 450 mm in length).

The advantage of the TJ-200 engine is the relatively low SFC (specific fuel consumption) when compared to similar engines in the same category. This fact makes the TJ-200 perfect for use in long range, small missiles or long range rockets. The rotating set is composed of an axial compressor (twin blade technology) powered by a single stage turbine rotor and the fuel is burned inside an annular style combustion chamber at the rate of 136 kg per hour at sea level ISA conditions.



The use of this innovative twin blade design concept for the compressor allows the TJ-200 engine to reach low SFC values, compared to its peers in the small size turbine market, creating new possibilities for military applications.

TJ-200  
Axial Compressor

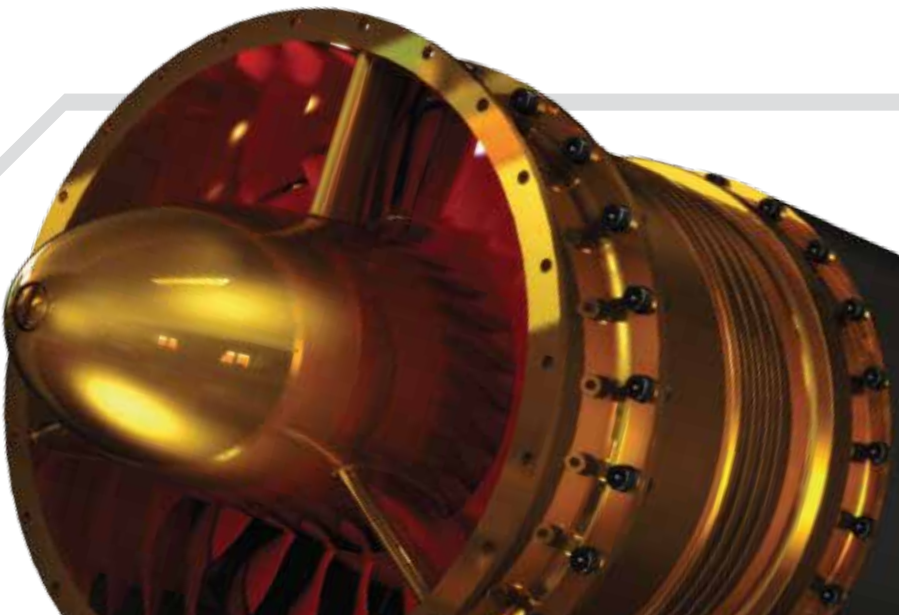
# TJ-200 Specifications

Polaris TJ-200 is a small single-shaft turbojet engine capable of providing up to 220 lbf of dry thrust (100kgf). Its robustness and low weight of 10 kg brings the advantage of a high thrust-to-weight ratio making it the perfect choice for use in small cruise missiles and UAVs.

General characteristics	Type: Length: Diameter: Dry weight:	Small Turbojet Engine 450mm (without nose) 160mm 10 kg (depending on required equipment and accessories)
Components	Compressor: Combustor: Turbine:	3 Stages (TwinBlade) Annular 1 stage
Performance	Maximum thrust: Fuel: Thrust-to-weight ratio: Specific fuel consumption:	220 lbf thrust (dry) Aviation Kerosene 10:1 1.36 kg/kgf.h

Type	Turbojet
National Origin	USA
Manufacturer	Polaris Propulsion Labs Inc.
Developer	Polaris Propulsion Labs Inc.
Applications	Small Missiles and Drones

## TJ-200 Turbojet Engine



TJ-200  
Small Turbojet Engine

