

General Specifications

Titan™ 130 Gas Turbine

- Industrial, Two-Shaft
- · Axial Compressor
 - 14-Stage
 - Variable Inlet Guide Vanes and Stators
 - Pressure Ratio: 17.5:1
 - Inlet Airflow:
 - 56.1 kg/sec (123.8 lb/sec)
 - Vertically Split Case
- · Combustion Chamber
 - Annular-Type, Conventional or Lean-Premixed, Dry, Low Emission (SoLoNOx™)
 - 21 Fuel Injectors (Conventional)
 - 14 Fuel Injectors (SoLoNOx)
 - Torch Ignitor System
- · Gas Generator Turbine
 - 2-Stage, Reaction
 - Max. Speed: 11,220 rpm
 - Thrust Bearing, Active: Tilting-Pad
 - Thrust Bearing, Inactive:
 Fixed Tapered Land
- Power Turbine
 - 2-Stage, Reaction
 - Max. Speed: 8820 rpm
 - Full Tilting-Pad Thrust Bearing
- · Journal Bearings
 - Tilting-Pad
- · Coatings
 - Compressor: Inorganic Aluminum
 - Turbine and Nozzle Blades:
 Precious Metal Diffusion Aluminide
- · Vibration Transducer Type
 - Proximity Probes

Key Package Features

- · Driver Skid with Drip Pans
- · Driven Equipment Skid
 - Multi-Stage Compressor
 Options, Single-Body or Tandem
 Compressor Configurations
 - Pipeline Compressor Options
 - Compressor Auxiliary Systems
- Compressors
- 316L Stainless Steel Piping ≤4" dia.
- · Compression-Type Tube Fittings
- · Electrical System Options
 - NEC, Class I, Group D, Div 1, or Div 2
 - ATEX, Zone 2
 - CENELEC, Zone 1
- Turbotronic[™] Microprocessor Control System
 - Onskid Control System (Div 2 or ATEX, Zone 2)
 - Freestanding Control Console
 - Color Video Display
- Vibration Monitoring
- · Control Options
 - 120-VDC Accessory Battery/ Charger System
 - Gas Turbine and Package Temperature Monitoring
 - Serial Link Supervisory Interface
 - Turbine Performance Map
- Compressor Performance Map
- Historical Displays
- Printer/Logger
- Remote Monitoring and Diagnostics Option
- Process Controls
- Compressor Anti-Surge Control
- Field Programming

- Start Systems
 - Pneumatic
 - Direct-Drive AC
- · Natural Gas Fuel System
- Integrated Lube Oil System
- Turbine-Driven Accessories
- AC Motor-Driven Accessories
- · Oil System Options
 - Oil Cooler
 - Oil Heater
 - Tank Vent Separator
 - Flame Trap
- Package Skid Design
 - Accommodates Mars[®] and Titan Turbines
 - Optional Modifications for Floating Production Applications
 - Drop-In Lube Oil Tank
 - Modularized System Design
- Axial Compressor Cleaning Systems
 - On-Crank
 - On-Crank/On-Line
 - Portable Cleaning Tank
- Gearbox (if applicable)
 - Speed Increaser
 - Speed Decreaser
- Air Inlet and Exhaust System Options (Carbon or Stainless Steel)
- · Enclosure and Associated Options
- Factory Testing of Turbine and Package
- Documentation
 - Drawings
 - Quality Control Data Book
- Inspection and Test Plan
- Test Reports
- Operation and Maintenance Manuals

Solar Turbines

TITAN 130

A Caterpillar Company

Gas Turbine Compressor Set

Oil & Gas Applications

Performance

Output Power	17 500 kW
	(23,470 hp)
Heat Rate	9620 kJ/kW-hr
	(6800 Btu/hp-hr)
Exhaust Flow	202 140 kg/hr
	(445,640 lb/hr)
Exhaust Temp.	480°C
	(895°F)

Nominal rating – per ISO At 15°C (59°F), at sea level

No inlet/exhaust losses

Relative humidity 60%

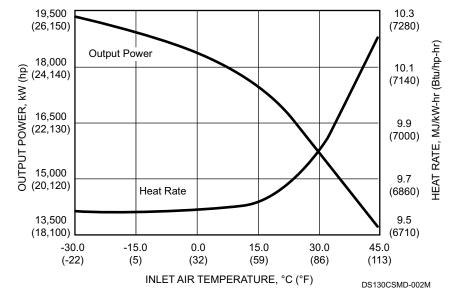
Natural gas fuel with

 $LHV = 35 MJ/nm^3 (940 Btu/scf)$

Optimum power turbine speed

AC-driven accessories
Engine efficiency: 37.4%

Available Power*



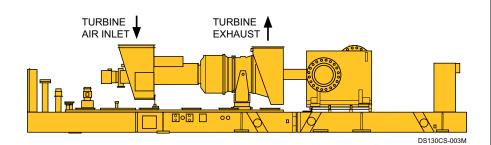
* SoLoNOx

Package Dimensions*

Length: 9.8 m (32' 0")
Width: 3.1 m (10' 2")
Height: 3.2 m (10' 4")

Typical Weight: 38 555 kg (85,000 lb)

*Driver package only, dry weight, unenclosed height



FOR MORE INFORMATION

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