

BIG

DEAL FOR SMALL POWER GEN

Already proven in applications around the world, the GE5 gas turbine has evolved into the new NovaLT™5 — building on the latest design advances from our highly successful NovaLT™16 development program.

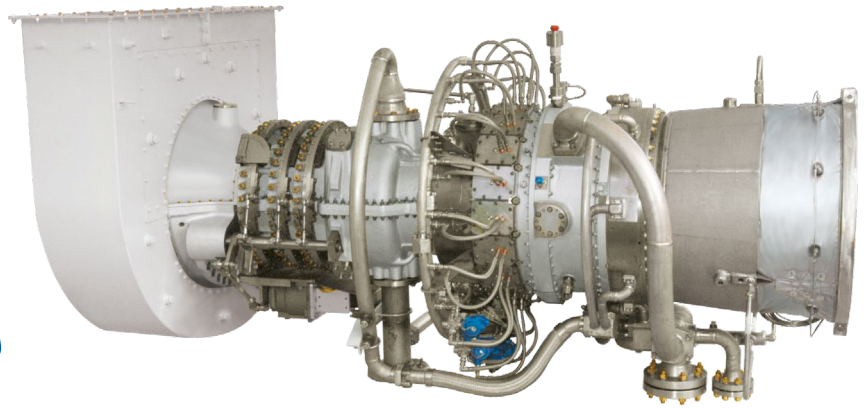
NovaLT5 is a compact solution for a wide range of power generation, mechanical drive, and industrial applications. It is available in single-shaft and double-shaft configurations, both with high efficiency, extended MTBM and significantly lower operating and maintenance costs.



NovaLT™5



NovaLT™5 gas turbine



Compact & Efficient

GE's NovaLT5 gas turbine is a welcome new alternative for a wide range of small power generation and mechanical-drive applications.

Both the single-shaft and double-shaft configurations are compactly designed, making them ideal for operations with challenging footprint and height restrictions.

The high exhaust temperature of the NovaLT5-1 is particularly advantageous for Heat Recovery System (HRS) operations.

Availability & Maintainability

Both models deliver exceptional uptime and enable significantly lower operating and maintenance costs than other turbines in the power class.

Maintenance plan:

- 12,000 hours: boroscopic inspection
- 24,000 hours: hot gas path inspection
- 48,000 hours: major overhaul

Maintenance can be performed at site, and the package is designed to allow engine swap in 24 hours (excluding cool-down).

NovaLT5-1

The single-shaft design consists of a high-pressure axial compressor, combustion section and a two-stage air-cooled turbine. It can be fueled with natural gas and/or liquid fuel and has premix burners to control emissions. The high exhaust temperature makes it well-suited to Heat Recovery System (HRS) operations.

Axial compressor

- 11-stage axial flow
- 1 IGV + 2 VIGV stages
- 14.8:1 pressure ratio

Combustion system

- Single, annular type
- DLN standard
- 18 fuel nozzles

Turbine

- 2-stage axial flow (16,630 RPM)

NovaLT5-2

The double-shaft design consists of a high-pressure module (axial compressor, combustion section and single-stage air-cooled turbine) and a low-pressure module (two-stage uncooled turbine with exhaust section).

Axial compressor

- 11-stage axial flow
- 1 IGV + 2 VIGV stages
- 14.6:1 pressure ratio

Combustion system

- Single, annular type
- DLN standard
- 18 fuel nozzles

Turbine

- HPT: 1-stage axial flow (16,630 RPM)
- LPT: 2-stage axial flow (12,500 RPM)

Key specifications

	Single shaft NovaLT5-1	Double shaft NovaLT5-2
Power (MW)	5.6 (electric)	5.6 (shaft)
Efficiency (%)	30.7 (electric)	31.5 (shaft)
HPT speed (RPM)	16,630	16,630
LPT speed (RPM)	N/A	12,500
Heat rate (kJ/kWh)	11,740 (electric)	11,429 (shaft)
Exhaust temp (°C)	574	556
Exhaust flow (kg/s)	19.6	20
Steam production (10 bar/a dry t/hr)	14.5	N/A
Emission NO _x /CO ₂ (natural gas) (in the range 50 to 100% load)	<25/20	<25/20
Pressure ratio	14.8	14.6
Mean time between major overhaul maintenance (hours)	48,000	48,000

Nominal performance @ ISO condition natural gas

