

# COMPLETE GAS TURBINE

# GE LMS100PA

## AVAILABLE IMMEDIATELY

BRAND NEW YEAR 2008  
AVAILABLE GE UPGRADE

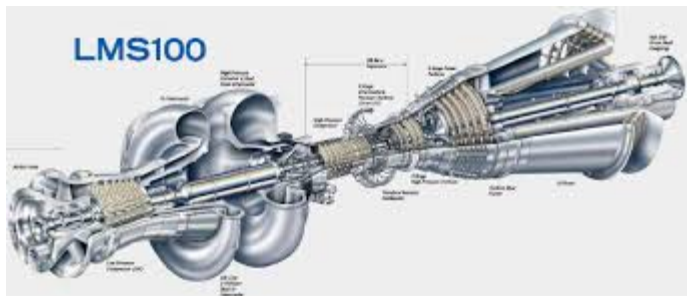
**The first specially developed gas turbine for power generation, using the best of two technologies: the robust frame gas turbine and the aeroderivative gas turbine.**

### FEATURES

- Power 100MW
- High full or partial power efficiency
- Cycle capacity
- Quick start
- Capacity for maximum demand
- Continuous generation on hot days
- Fuel Flexibility
- Low emissions
- Low maintenance costs
- Maximum power in 10 minutes
- Designed for cycling applications



**The equipment is stored in an ad hoc warehouse complying with the manufacturer's storage and maintenance conditions**



# INCLUDED EQUIPMENT

GE LMS100PA Gas Turbine  
Generator  
Housing  
Turbine base  
Air intake system  
Anti-icing system  
Intercooler  
Turbine Exhaust  
Fuel system  
Water-based NOx control  
Cooling Pumps  
Lubrication system  
Electro-hydraulic starting  
PCI  
Control system

Battery system  
Protective relays  
Cleaning system  
Single cycle exhaust system  
CO reduction system  
Gas filter  
Demineralised water filter  
Emission control system  
GTG Foundation Anchorage System  
GTG Engine Control Center  
Power Control Module  
Interconnection pipes  
Ventilation pipes  
Control and power cable  
Component testing and factory testing

REPOWERING SOLUTIONS is a British Company with focus of activity in the energy sector. We work in the worldwide energy market offering global solutions for investments optimisation.

REPOWERING SOLUTIONS has been formed as result of integrating several corporations with great expertise in a wide range of specialised areas on energy. We aim to offer an integrated, complete and specific solution for each project. Our services ranges from engineering, sale and distribution to logistics and transportation. We specially regard the recovery of value for industrial equipment, being of great weight in our projects portfolio.

REPOWERING SOLUTIONS mission statement is the offering of those technical and financial proposals to answer those fundamental questions raised in any new project of energy generation: which is the best technological answer combining the best degree of efficiency and effectiveness with the least investment, the least investor risk with the greatest level of profitability? By asking this ourselves, we focus in acting in the best interests of our clients, putting their interests at the heart of everything we do

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## LATAM

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## ENGLAND

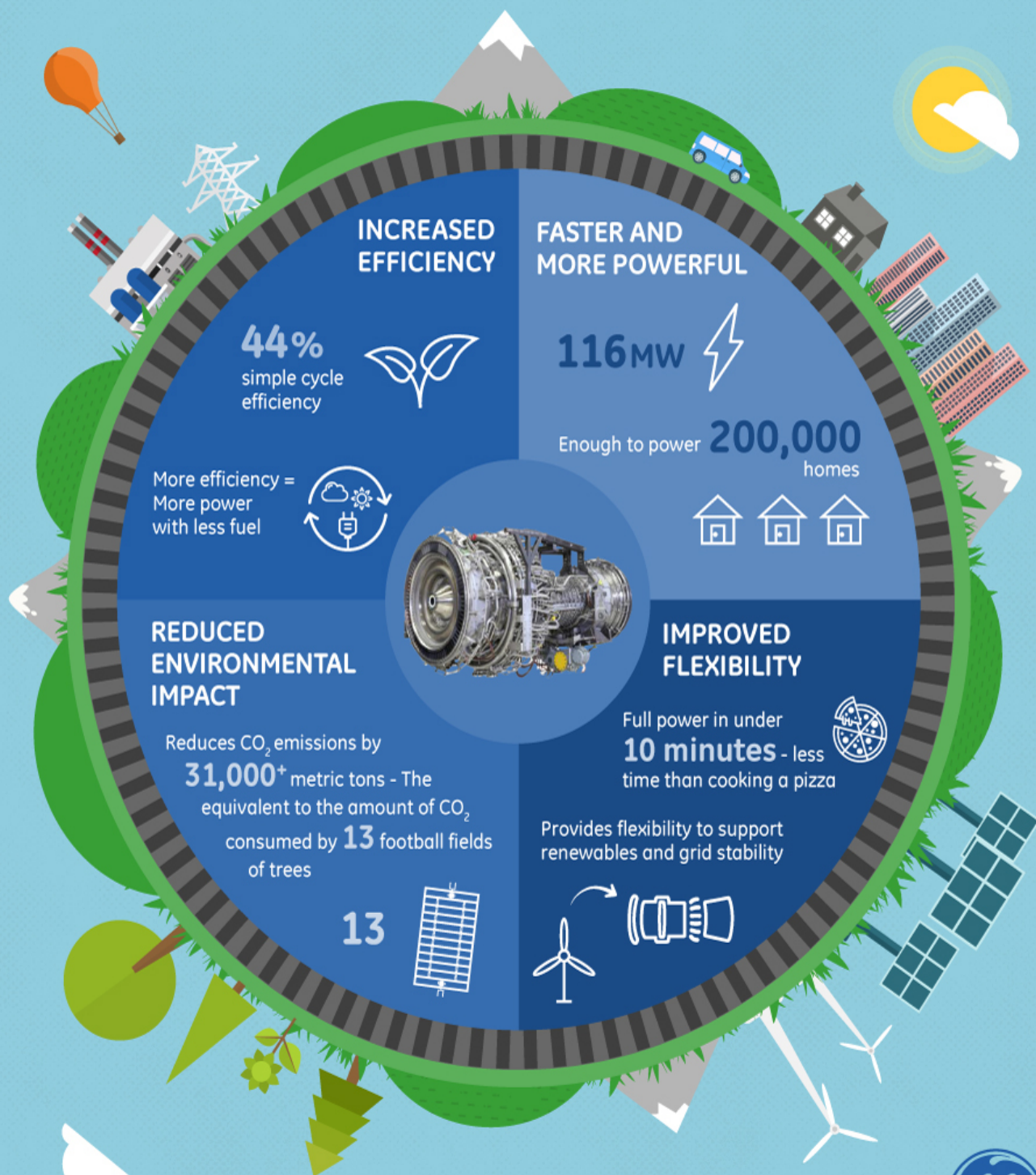
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# LMS100

## THE WORLD'S MOST EFFICIENT SIMPLE-CYCLE GAS TURBINE





# LMS100 POWER PLANTS

**117 MW**  
SIMPLE CYCLE OUTPUT

**>44%**  
SIMPLE CYCLE EFFICIENCY



## CAPABILITY

Desalination capability from waste heat off intercooler can generate up to 3,000+ gallons per minute



## VERSATILITY

Available dual fuel capability with fuel switching at full power



## SUSTAINABILITY

Zero water option and lowest CO<sub>2</sub> emitting simple cycle gas turbine

If it's efficiency you're looking for, search no more. Our LMS100 aeroderivative gas turbine is the highest simple cycle efficiency gas turbine in the world. Its intercooled gas turbine system provides rapid startup, with an 8-minute start to full load and emergency ramp speeds of up to 500 MW/minute. In high renewable penetration areas like California, our LMS100 gas turbines are providing 2.8 GW of generation with more than 1,400 MW/minute of ramping capability.

Simple cycle specifications	50 Hz	60 Hz
Net output (MW)	117	117
Net heat rate (Btu/kWh, LHV)	7,925	7,718
Net heat rate (kJ/kWh, LHV)	8,362	8,143
Net efficiency (% LHV)	43.5%	44.3%
Ramp rate (MW/minute)	50	50
Startup time (cold iron) (min.)	8	8
Exhaust temp (°F/°C)	824/440	810/432
Exhaust mass flow (lbs)	516.9	516.9
Exhaust mass flow (Kg/s)	234.5	234.5
<b>Combined cycle 1x1 specifications</b>		
Net output (MW)	142	140
Net heat rate (Btu/kWh, LHV)	6,540	6,438
Net heat rate (kJ/kWh, LHV)	6,900	6,793
Net efficiency (% LHV)	51.6%	52.1%
Ramp rate (MW/minute)	50	50
Startup time (cold iron) (min.)	30	30
Exhaust temp (°F/°C)	824/440	810/432
Exhaust mass flow (lbs)	516.9	516.9
Exhaust mass flow (Kg/s)	234.5	234.5
<b>Combined cycle 2x1 specifications</b>		
Net output (MW)	284	281
Net heat rate (Btu/kWh, LHV)	6,511	6,411
Net heat rate (kJ/kWh, LHV)	6,870	6,764
Net efficiency (% LHV)	51.6%	52.1%
Ramp rate (MW/minute)	100	100
Startup time (cold iron) (min.)	30	30
Exhaust temp (°F/°C)	824/440	810/432
Exhaust mass flow (lbs)	516.9	516.9
Exhaust mass flow (Kg/s)	234.5	234.5
<b>LMS100 additional specifications</b>		
Reliability	99.6%	99.6%
Availability	96.7%	96.7%
Start reliability	99.7%	99.7%
Fleet operation hours	742,897	742,897
Hot section hours	25,000	25,000
Overhaul hours	50,000	50,000
NOx emission (ppm) (@ 15% O <sub>2</sub> )	25	25
CO (ppm) (@ 15% O <sub>2</sub> )	95/250*	95/250*
Package noise (dBA average)	85	85
Combustion	SAC	SAC
Legacy name	PA+	PA+

NOTE: All ratings are net plant, based on ISO conditions and natural gas fuel. Actual performance will vary with project-specific conditions and fuel.