

M200

by Mitis



World First Flameless Combustion Micro Gas Turbine



Truly Multi Fuel

Compatible with various hydrocarbon gaseous, liquid and mixtures fuels, hydrogen ready



Ultra Low Emissions

Ultra- Low NOx thanks to flameless combustion. Oxygen rich exhaust



Combined Heat & Power

Maximum fuel conversion efficiency with combined heat and power, and cooling.



Low Maintenance

Oil-free operation thanks to aerodynamic air foil bearings

Applications



CHP for Industry

Industrial CHP with M200 delivers reliable, low-maintenance power and heat with ultra-low emissions, high fuel flexibility, and compact, efficient operation.



Biogas

Biogas from wastewater, landfill, or large plants can be efficiently converted with M200 micro gas turbines, enabling robust, low-emission power generation from variable and challenging gas streams.



Flare Gas

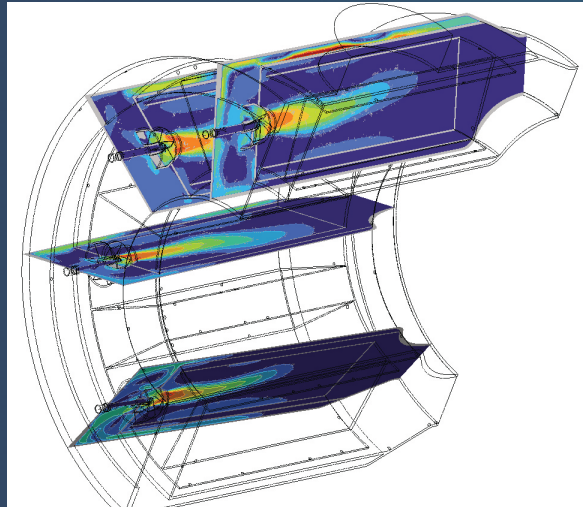
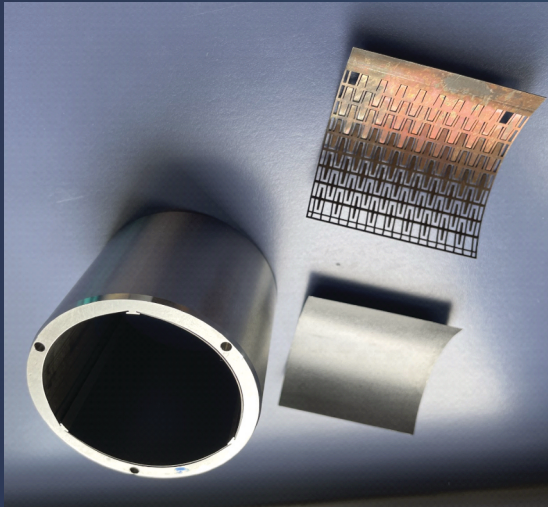
M200 produces electricity and heat for local infrastructure from flare and complex gas mixtures, using flameless combustion to deliver ultra-low emissions—ideal for remote oil fields and industrial off-gas.



Hybrid energy Systems

Hybrid energy systems combine M200 with renewables to provide reliable, low-carbon power, ensuring stability while reducing fuel use and emissions.

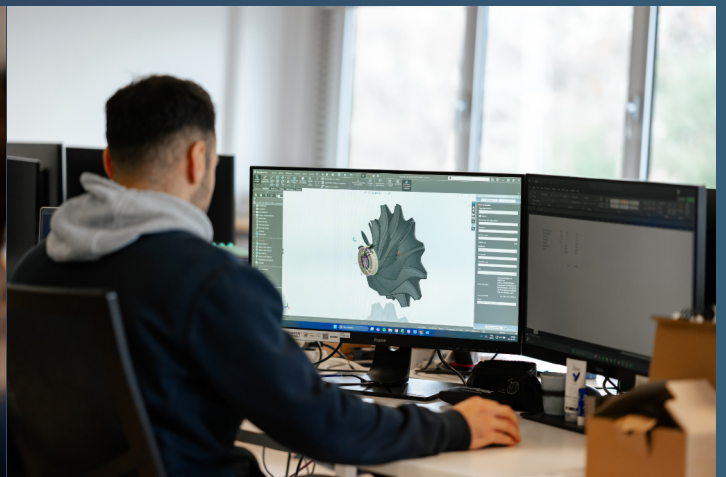
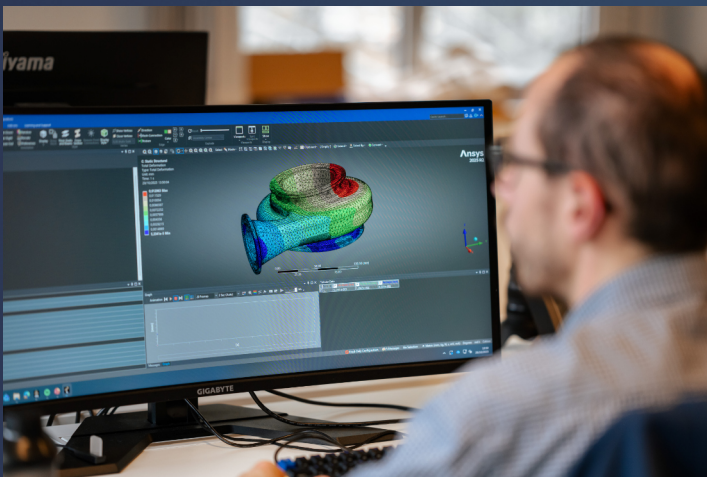
M200 Microturbine



The M200 microturbine features MITIS' patented flameless combustion technology, ensuring multi-fuel capability, including low-calorific and complex gases, while delivering ultra-low NO_x emissions.

Equipped with MITIS' air foil bearing technology, the system operates fully oil-free, reducing complexity, maintenance, and operating costs while enhancing reliability.

Engineered with Advanced Modelling & Simulation



Specifications

M1000 System:

Type	Recuperated Micro Gas Turbine
Engine	Variable high speed gas turbine (up to 60,000 RPM)
Operation	Continuous
Lubrification	Air foil bearings
Cooling	Water cooling for power electronics
Service	12,000 hours
Communication	dry contacts / ethernet / usb / (option : other communication)

Output:

Electric power	[kVA]	200
Output Voltage On-Grid	[V]	Automatic
Output Voltage Off-Grid	[V]	400, 480 (3P + N (selectable))
Frequency Off-Grid	[Hz]	50 or 60

(1) Natural Gas

Fuel and Emissions:

Fuel types	Natural gas, LPG, biogas, low LHV gas, flare gas, liquid fuels, H2/NG mix, etc	
Air flow	[kg/s]	~ 1,5
NOx at 15% O ₂ (1)	[ppmvd]	< 20
CO at 15%O ₂ (1)	[ppmvd]	< 15
Exhaust flow Temperature	[°C]	~280

Operating Conditions:

Sound Pressure Level (at 1 m)	[dB]	~70
Ambient temperature	[°C]	-20 to +40
Operating Altitude	[m]	0 - 2000
Relative humidity	[%]	0 - 100
Envelope protection rating	IP24 (standard)	

Soundproof Canopy	Tropicalized C5 200 micron	
Fire protection	[min]	30

Dimensions & Weight:

Width	[cm]	244
Length	[cm]	299
Height	[cm]	259
Weight	[kg]	< 4000

Disclaimer: All specifications, performance data, and dimensions are indicative and subject to change without notice as part of ongoing product development.