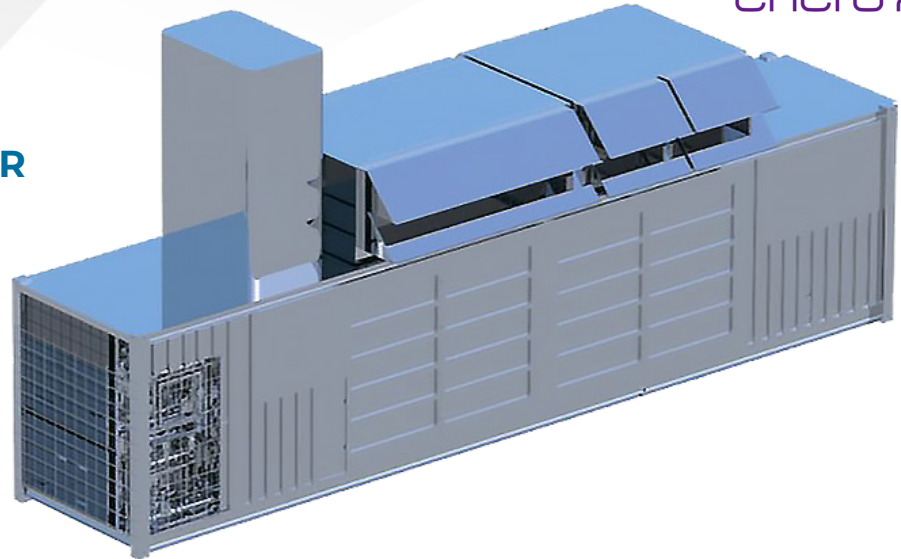




**HIGH EFFICIENCY 2MW  
GAS TURBINE GENERATOR**

**1,800+ kW  
CONTINUOUS  
ELECTRICAL POWER\*  
WITH OPTIONAL  
INTEGRATED HEAT  
RECOVERY**



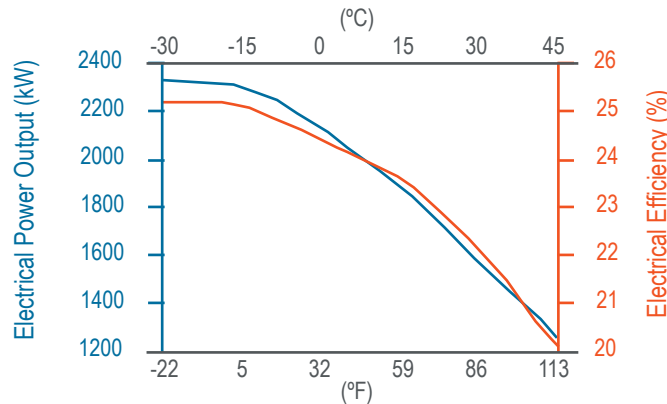
**KEY FEATURES**

- Speed reduction gearbox
  - Epicyclic with journal bearings
  - Available in 50Hz and 60Hz version (1500/1800 rpm)
  - Equipped with thermocouples on main bearings
- Turbine Rotor Bearings
  - Cold side of the engine
  - Thrust (tilting pad) and journal
- Compressor wheel
  - Centrifugal single stage
- Turbine wheel
  - Radial inflow single stage
- Combustors
  - Dry Low Emission

**ELECTRICAL PERFORMANCE**

CHARACTERISTIC	SPECIFICATION
Electrical efficiency	23.4%
Electrical power	1,877 kW

\*ISO Conditions on high pressure natural gas



**Rugged Gas Turbine**

- Wide Acceptable gas range; ~800 Btu/scf to ~2300 Btu/scf (~29.7 MJ/Sm<sup>3</sup> to 86.2 MJ/Sm<sup>3</sup>)
- H<sub>2</sub>S tolerance up to 1.5% by weight
- Can burn up to 5% hydrogen (100% expected by 2025)

**Control System**

- Woodward Flex 500 PLC-Based Turbine Control Panel (TCP)
- MCC, main circuit breaker, communication link to ICCS/DCS optional

**Complete Turbine Package**

- On board control system
- Air intake filtration
- Exhaust with silencer
- Fuel system
- Ventilation system
- CO<sub>2</sub> fire suppression system

**Combined Heat and Power with HRSG or Absorption Chiller**

- High Efficiency CHP: Up to 85%
- Steam output 14,500 lbs/hr at 145 psig (6.6 metric t/h at 10 barg)
- Chiller output 1800 TR (6.3 MW)

**Voltage**

400 V – 13.8 kV

**Frequency**

60 Hz / 50 Hz

**Compressor Pressure Ratio**

7:1

**Air Inlet Mass Flow**

20.4 lb/sec (9.26 kg/s)

**Available Exhaust Heat**

1.53 MMBtu/hr (5,221 kW)

**Exhaust Gas Temperature**

1112° F (600° C)

**Coupling**

Flexible dry coupling with integrated shear pin for overload protection

**Starter System**

Hydraulic starter with electric motor and high-pressure pump

**Lubrication Oil System**

- Turbine Driven
- Oil cooler and filtration included

**Synchronous Generator**

- 4 pole, 480 or 400 V standard
- Available up to 13 kV

## AMBIENT TEMPERATURE LIMIT

CHARACTERISTIC	SPECIFICATION
Standard	4° F to 113°F (-20°C to 45°C)
Extreme Temperature Conditions*	— Option 1: Below -4° F (-20° C) — Option 2: Above 113° F (45° C)

\*Includes control system cabinet.

## EMISSIONS - ISO CONDITIONS

ppm @ 15% O <sub>2</sub> Dry Exhaust	Natural Gas Fuel		
	Load	70%	<70%
NOx	≤10	50	50
CO	≤10	50*/600	1500

\* May use compressor bleed to achieve this level of CO emission

### ISO Condition

LHV:	935 Btu/scf (35.0 MJSm <sup>3</sup> ) (Natural Gas Fuel)
Altitude:	sea level
Ambient Temperature:	59° F (15° C)
Barometric Pressure:	14.696 psi (1.012 bar)
Relative Humidity:	60%

## PACKAGED UNIT PHYSICAL SPECIFICATIONS

DIMENSION	WIDTH	LENGTH	HEIGHT	WEIGHT
Metric	2.44 m	12.19 m	6.05 m	26,500 kg
Imperial	8 ft - 0 in	40 ft - 0 in	19 ft - 10 in	58,400 lbs

## SOUND LEVELS

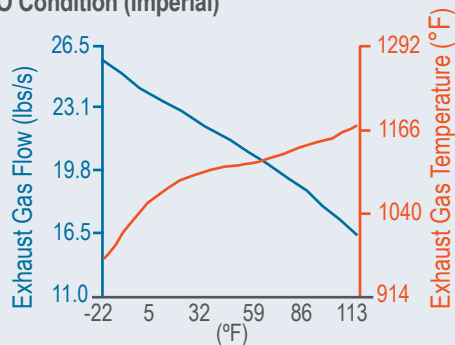
CHARACTERISTIC	SPECIFICATION
Standard	85 dB(A) @ 1 m

## APPLICABILITY

- Wide range of applications already proven through existing installed base both on- and off-shore.
- Transforms associated flare and waste gases and tank vapors from oil and gas operations into a continuous source of clean electric power.
- Converts biogases from landfills, wastewater treatment plants, and digesters into useful power and heat for use on site.
- Eliminates need for diesel transport, simultaneously cuts added emissions from typical diesel- or gas-powered reciprocating engine turbines.

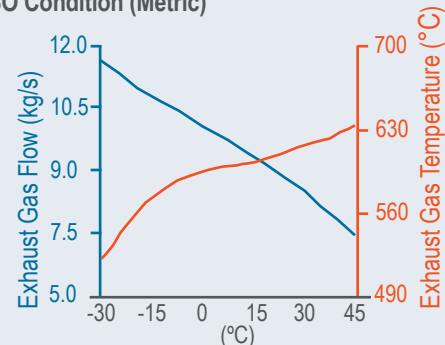
### PERFORMANCE - EXHAUST

ISO Condition (Imperial)



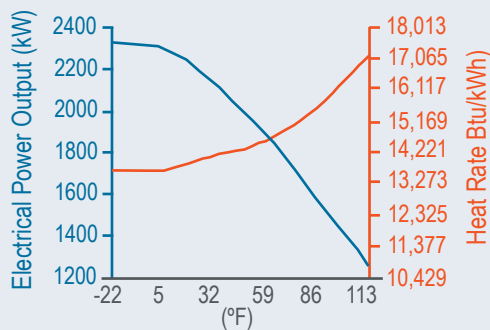
### PERFORMANCE - EXHAUST

ISO Condition (Metric)



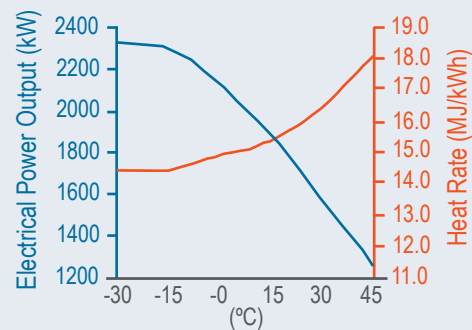
### PERFORMANCE - HEAT RATE

ISO Condition (Imperial)



### PERFORMANCE - HEAT RATE

ISO Condition (Metric)



©2022 Flex Leasing Power and Service, LLC and/or its affiliates ("FlexEnergy Solutions"). This document comprises a general overview of the products or services described herein. It is solely for informational purposes, does not represent a warranty of the information contained herein and is not to be construed as an offer to sell or solicitation to buy. Contact FlexEnergy Solutions for detailed product, design, and engineering information suitable to your specific applications. FlexEnergy Solutions reserves the right to modify its products and related product information at any time without prior notice.