

**SIEMENS***Ingenuity for life*

E-Series Engines

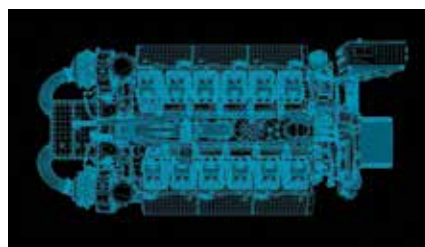
SGE-EM 2 MW-Class Gas Engines & Gensets

[siemens.com/e-series-gas-engines](https://www.siemens.com/e-series-gas-engines)

The new best-in-class solution for more efficient power generation.

In the past, when it came to choosing a 2 MW-class engine, your options were limited. Now, there's a powerful new choice available that delivers the highest electrical efficiency in the smallest footprint: the new SGE-EM gas engines from Siemens.

- **Unique high-volume 12-cylinder design** delivers highest displacement
- **90,000 hours until overhaul**
- **Innovative pre-combustion chambers** provide efficient and stable combustion
- **Spark-ignited lean-burn unit** ensures low emissions
- **Fast cycle times and implementation**
- **Smallest footprint** in the competitive set
- **Lowest emission version available 200 mg NO_x**



| SGE | 86EM | 100EM |
|----------------------|-----------|------------|
| RPM | 1,500 | 1,200 |
| CYLINDER ARRANGEMENT | V12 | V12 |
| DISPLACEMENT | 86 liters | 100 liters |
| BORE | 195 mm | 195 mm |
| STROKE | 240 mm | 280 mm |
| COMPRESSION RATIO | 13.5:1 | 13.5:1 |

| SGE | 86EM | 100EM |
|-----------------------|-----------------------|-----------------------|
| BMEP* | 19.2 bar | 20.7 bar |
| MECHANICAL POWER | 2,065 kWb | 2,065 kWb |
| ELECTRICAL POWER | 2,012 kW _e | 2,013 kW _e |
| MECHANICAL EFFICIENCY | 46.6% | 46.7% |
| ELECTRICAL EFFICIENCY | 45.4% | 45.5% |
| GLOBAL EFFICIENCY | 89.1% | 88.9% |

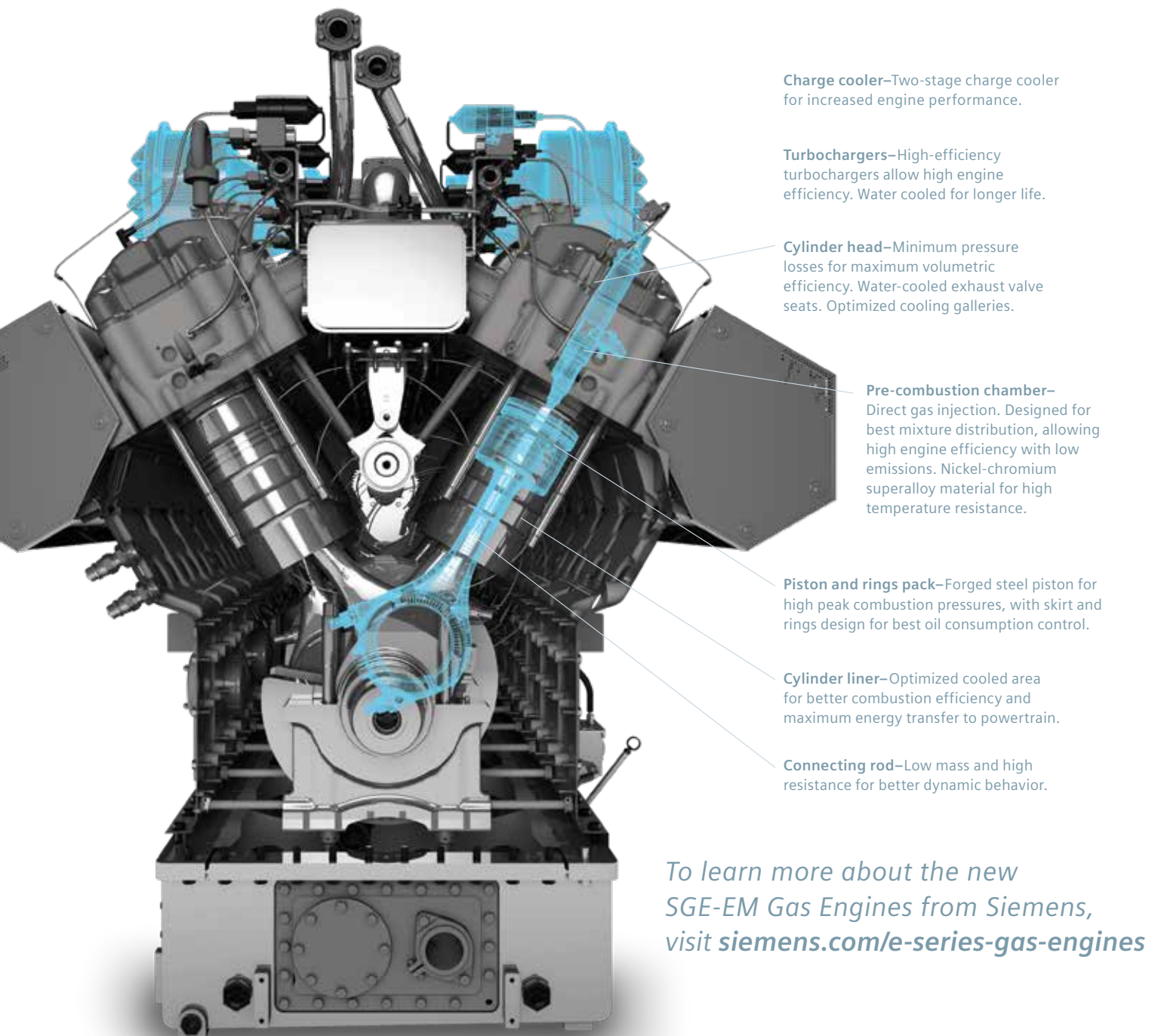
*Brake Mean Effective Pressure

**Data for 500 mg/NO_x

The new best-in-class solution with the highest electrical efficiency.

Our new 2 MW-class SGE-EM gas engines represent a new competitive choice with the highest electrical efficiency and displacement in its category. All this power and efficiency is available in the smallest footprint with industry-leading cycle times.

Innovative design and combustion technology.



Charge cooler—Two-stage charge cooler for increased engine performance.

Turbochargers—High-efficiency turbochargers allow high engine efficiency. Water cooled for longer life.

Cylinder head—Minimum pressure losses for maximum volumetric efficiency. Water-cooled exhaust valve seats. Optimized cooling galleries.

Pre-combustion chamber—Direct gas injection. Designed for best mixture distribution, allowing high engine efficiency with low emissions. Nickel-chromium superalloy material for high temperature resistance.

Piston and rings pack—Forged steel piston for high peak combustion pressures, with skirt and rings design for best oil consumption control.

Cylinder liner—Optimized cooled area for better combustion efficiency and maximum energy transfer to powertrain.

Connecting rod—Low mass and high resistance for better dynamic behavior.

To learn more about the new SGE-EM Gas Engines from Siemens, visit [siemens.com/e-series-gas-engines](https://www.siemens.com/e-series-gas-engines)