

**SIEMENS***Ingenuity for life*

E-Series Engines

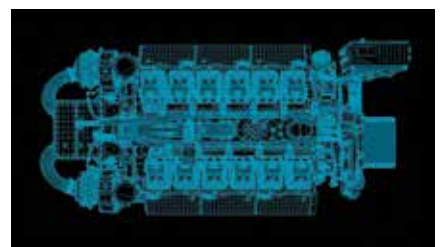
# SGE-EM 2 MW-Class Gas Engines & Gensets

[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<sub>x</sub>**



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 <sub>e</sub>	2,013 kW <sub>e</sub>
MECHANICAL EFFICIENCY	46.6%	46.7%
ELECTRICAL EFFICIENCY	45.4%	45.5%
GLOBAL EFFICIENCY	89.1%	88.9%

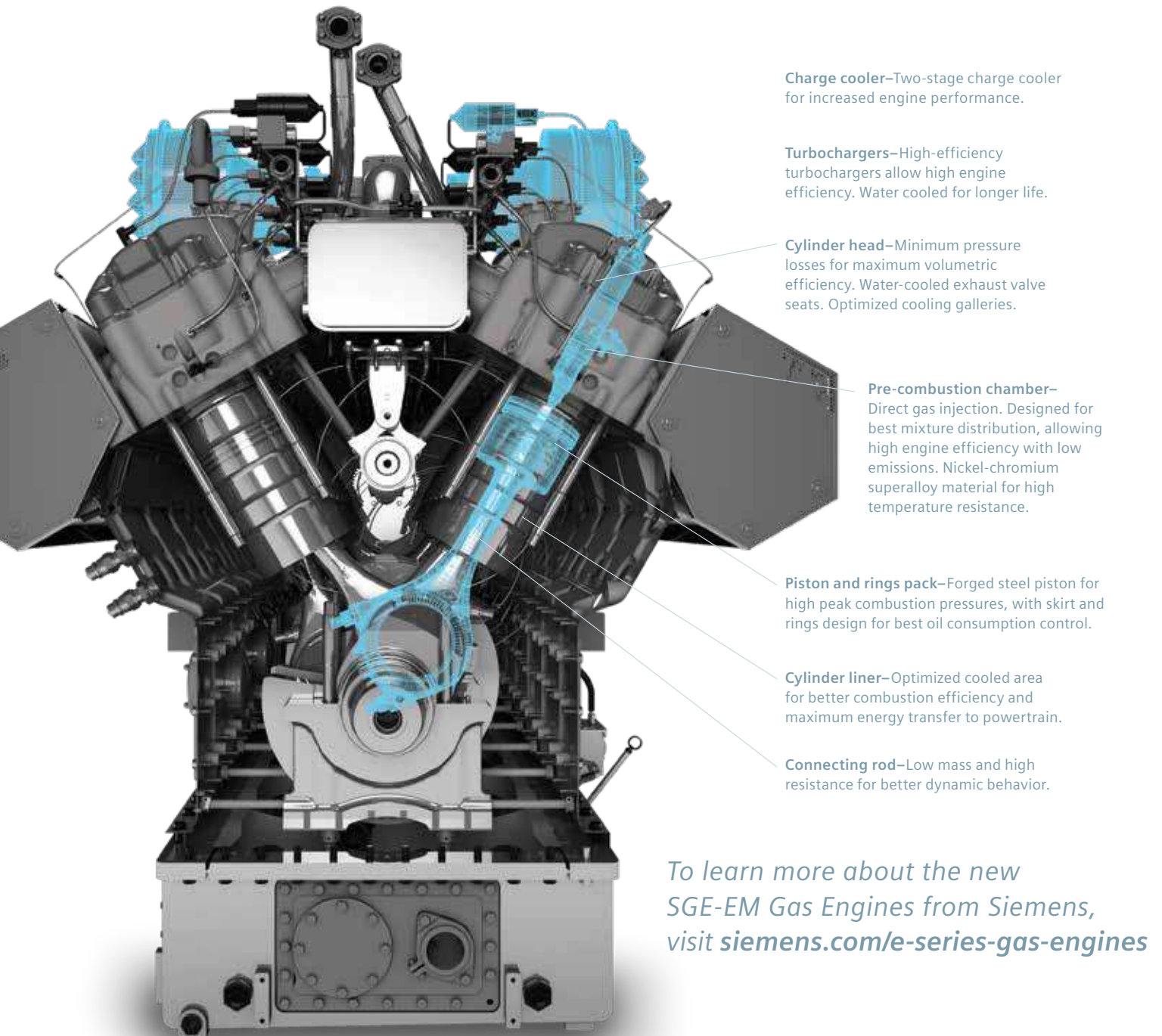
\*Brake Mean Effective Pressure

\*\*Data for 500 mg/NO<sub>x</sub>

# 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)