

Wärtsilä Modular Block ensuring a reliable power source for Data Centers

The dynamic and rapidly expanding global data center industry needs to be able to focus on its core business. Having to worry about the power supply detracts from that focus. There now exists a ready solution for achieving this peace of mind, while being able to cascade investments, improve business effectiveness, and develop partnerships, at the same time making a contribution to combating climate change. The solution is Wärtsilä Modular Block, which enables the creation of a multi-purpose power plant to ensure clean, affordable primary power generation, as well as flexible and reliable backup.

To overcome the challenges associated with being dependent on local utilities for the electricity supply, the alternative is for data centers to have their own independent power generation capability. Wärtsilä Modular Block concept makes this feasible, practical and cost-efficient. Furthermore, through partnerships, the investor in the power plant can be a third party, and the data center can use the resource when needed. The facility can be easily integrated with typical data center power distribution systems and, if connected to the grid, it is possible to sell excess energy.

Wärtsilä Modular Block solution is an extensively pre-fabricated, modularly configurable, and expandable enclosure with quick delivery and onsite installation time. It incorporates medium-speed Wärtsilä 34SG spark ignited gas engines to deliver the high levels of power needed, efficiently, reliably, and with a minimal environmental impact. The Modular Block approach offers an attractive capital investment, which can be cascaded in accordance with growing needs, while the operating costs (OPEX) are almost certainly going to be lower than purchasing electricity from the grid.

A ready-to-go solution

Wärtsilä Modular Block concept includes most of the process equipment needed for converting a single or several generating sets into a compact power station. Its pre-fabricated, modular design means that it can be quickly and easily installed in just a few weeks. Similarly, it can be disassembled and re-installed at an alternative location should it be necessary, or expanded with additional modular blocks should the power requirements increase. This flexibility makes it possible to set-up data centers in locations, even remote areas, where attractive conditions exist. Dismantlability opens a possibility for resales business or rental partner.

“This concept reverses the traditional power delivery paradigm for data centers. Typically the utility controls the supply and its cost, with the center having a back-up generator in case of an emergency. Here, the data center has control over its own electric supply, which is delivered at an economic and predictable cost, and the grid acts as the back-up. Furthermore, any excess power generated by the Modular Block can be sold to the utility,” says Antti Kämi, Vice President, Engine Power Plants, Wärtsilä Energy Business.

An effective smart business approach

Flexibility is the key to successful applications in every facet of business in the 21st century. The Wärtsilä Modular Block solution represents a highly flexible means for making data center operations more reliable, more cost-efficient, and more independent. Environmental sustainability is enhanced by reducing the emissions arising from the power grid energy production and from the on-site back-up diesel generators. Operationally flexible Wärtsilä 34SG gas engines also allow higher penetration of variable renewable power generation as well as future renewable liquid and synthetic fuels.

Read more:

[Link to website Optimal Energy Solutions For Data Centers](#)

[Link to website Wärtsilä Modular Block](#)

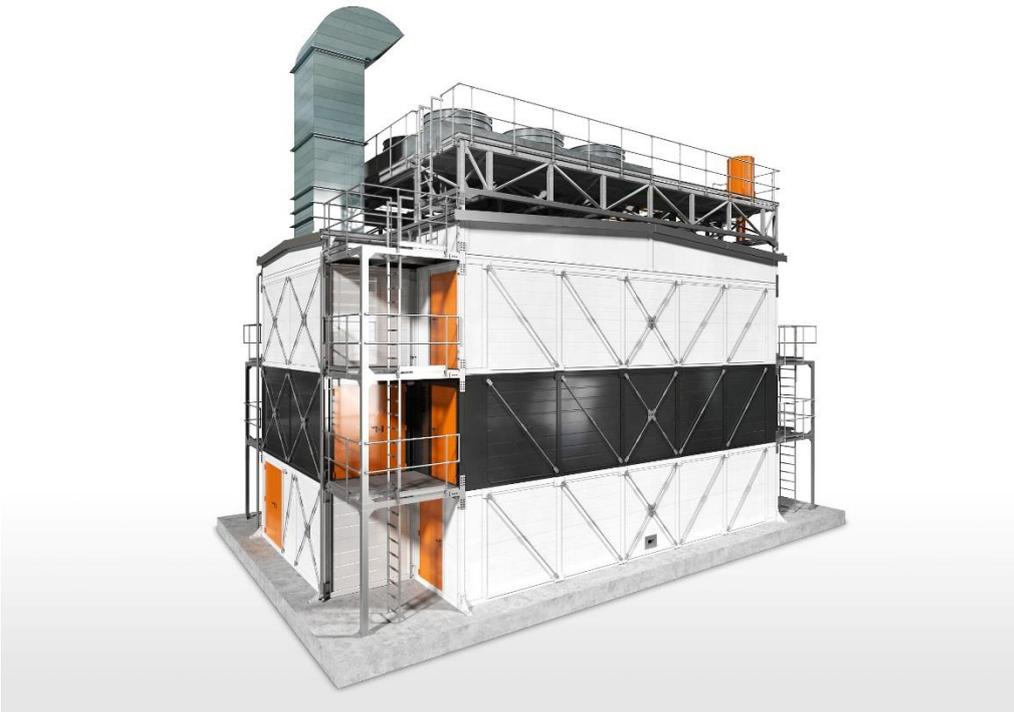


Image1: Wärtsilä Modular Block is a scalable and redeployable power generation solution with fast delivery and installation.

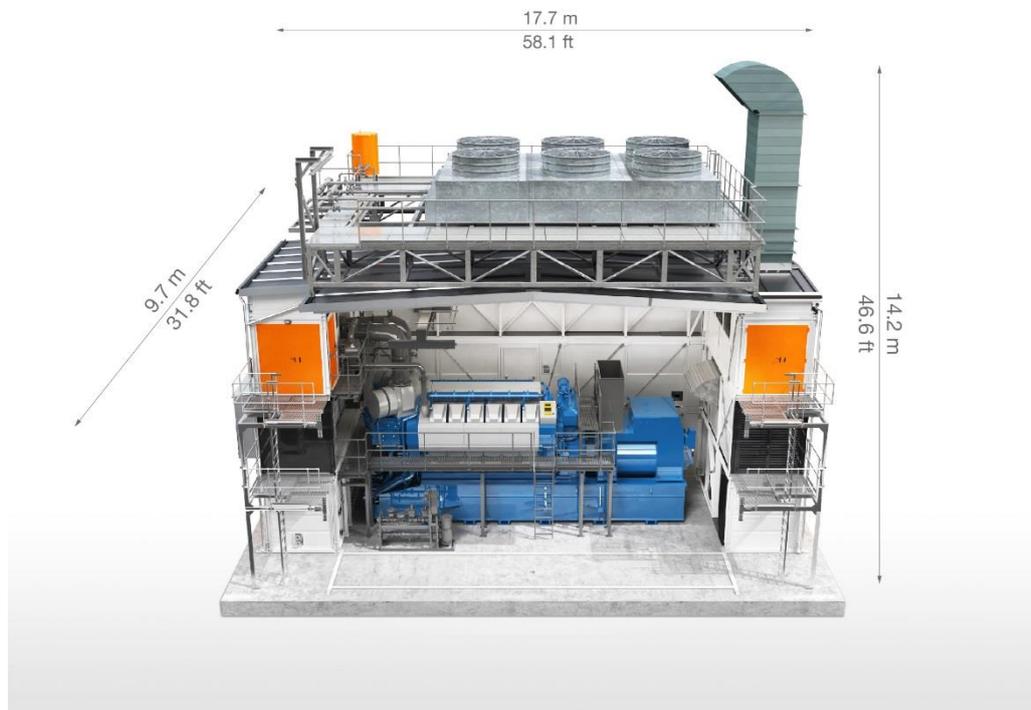


Image2: Wärtsilä Modular Block features pre-fabricated, expandable enclosures for sustainable power generation.

For further information on the Wärtsilä Modular Block power generating solution for data centers, please contact:

Timo Mahlanen
General Manager, Data Centers
Wärtsilä Energy Business
Tel. +358 40 500 0536
timo.mahlanen@wartsila.com

Mirja-Maija Santala
Manager, Marketing & Communications
Wärtsilä Energy Business
Tel: +358 400 793 827
mirja-maija.santala@wartsila.com

Wärtsilä in brief

Wärtsilä is a global leader in smart technologies and complete lifecycle solutions for the marine and energy markets. By emphasising sustainable innovation, total efficiency and data analytics, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers. In 2018, Wärtsilä's net sales totalled EUR 5.2 billion with approximately 19,000 employees. The company has operations in over 200 locations in more than 80 countries around the world. Wärtsilä is listed on Nasdaq Helsinki.

www.wartsila.com

Wärtsilä Energy Business in brief

Wärtsilä Energy Business is leading the transition towards a 100% renewable energy future. As an energy system integrator, we understand, design, build and serve optimal power systems for future generations. Wärtsilä's solutions provide the needed flexibility to integrate renewables and secure power system reliability. Our offering comprises engine-based flexible power plants – including liquid gas systems – hybrid solar power plants, energy management systems and storage and integration solutions. We support our customers over the lifecycle of their installations with services that enable increased efficiency and guaranteed performance. Wärtsilä has 70 GW of installed power plant capacity in 177 countries around the world.

www.wartsila.com/energy