



**Biofuel boilers
from 48 to 256 kW**

Optitherm Duo

**Fuel :
up to 100% biofuel**



48, 56 and 64 kW
(cascade possible up to 4 boilers)



Heating only or
Heating + hot water with a separate tank



Chimney



10-year warranty (see below)



Stoptherm : device preventing any risk of corrosion and allowing operation without a lower temperature limit, without a mixing valve



Biofuel-compatible low NOx burner integrated into the boiler (Eco-Design certified 2018)



100% biofuel compatible

Optitherm Duo : for significant energy savings

Optitherm Duo is a set of 2 biofuel boilers stacked within a single 60 cm wide casing. The boilers are available in 24 and 32 kW power outputs. Therefore, Optitherm Duo units are available with a total power output of 48, 56, and 64 kW.

Installing an Optitherm Duo boiler allows for closely matching the provided power with the current heating needs, to :

- achieve **significant fuel savings**;
- increase the **lifespan** of the equipment;
- benefit from the **security** of two boilers.



Heat exchanger warranty: 10 years.

Conditions :

- 1 - Return of the special 10-year warranty form,
- 2 - Annual maintenance of the boiler by a professional starting from the first year and throughout the warranty period
- 3 - Proof : invoices for these annual services.



PERGE, French boiler manufacturer since 1971



Product robustness

At its site in Portes-Lès-Valence (26), PERGE relies on dedicated personnel committed to the quality of the products they manufacture.



Optitherm Duo : Simple Installation and Operation

Optitherm Duo, like all PERGE biofuel boilers, features the Stoptherm device, allowing operation without limiting the return temperature without the need for a mixing valve. Direct connection of heating circuits to the boiler greatly simplifies its installation.

Optitherm Duo can be equipped with the RTE3 climatic control system for burner action, providing total modulation of the power delivered to the water.

Heating and DHW inputs allow for integration with existing control systems.

Optitherm Duo : Cascade Installation

For even greater flexibility, it is possible to install a cascade of Optitherm Duo units, with up to 4 cascade stages. One stage can control an Optitherm Duo or a burner within an Optitherm Duo.

Example application :

- 4 Optitherm Duo boilers, each with a power output of 64 kW, with 64 kW per cascade stage for a total power output of 256 kW
- 2 Optitherm Duo boilers, each with a power output of 64 kW, with 32 kW per cascade stage for a total power output of 128 kW

Ease of installation

Thanks to the Stoptherm device, the dew point inside the heat exchanger is avoided without the need for a mixing valve. This allows operation without a lower temperature limit, or even the total shutdown of the boiler. Maintenance consumption is reduced, leading to significant fuel savings. **Any risk of corrosion** of the heat exchanger is thus **eliminated**.

Environmentally friendly

In addition to the low NOx burner, PERGE Optitherm Duo oil boilers benefit from the latest research developments in the field of biofuel.

PERGE, as an industrial partner in this program, offers burners compatible with biofuel containing up to 100% biofuel (often Rapeseed Methyl Ester – RME).

Rapeseed Methyl Ester (RME) is a biofuel largely produced in France.

Proximity to teams

Customer service is at the heart of the approach taken by PERGE's technical and commercial teams.



Example application :

A character house with large surfaces and volumes to heat may have a heating demand of 60 kW during the coldest time of the year. However, during the shoulder seasons, the heating requirements will be much lower, often half as much. This can also be the case if part of the house is unoccupied and maintained at a lower temperature. Installing a 64 kW Optitherm Duo allows for meeting the maximum heating demands while having only one of the two boilers operating during the shoulder seasons.

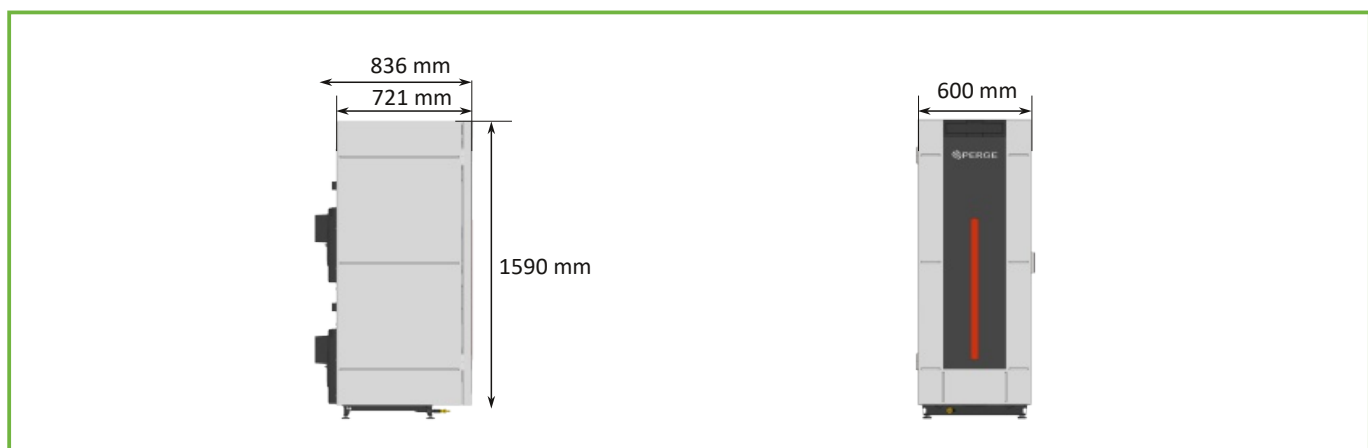
In this setup, the controller (1) determines the heating demand based on the outdoor temperature (2) and the indoor temperature, and decides whether to activate one or both boilers (3) (4). Operating only one boiler to meet the needs during the shoulder seasons reduces the power used and energy consumption. Additionally, the lifespan of the second boiler is extended.



Technical and dimensional characteristics

Model	24+24 C-F30	24+32 C-F30	32+32 C-F30
Maximum useful output (kW)	49,2	58,4	67,6
Boiler N°1			
Nominal thermal output (kW)	24,6	24,6	33,8
Efficiency Eta1 at 30% load and return 37°C (%)	97,1	97,1	97,3
NOx emissions (mg/kWh)	110	110	104
Seasonal Energy Efficiency Etas (%) of the boiler	86,2	86,2	86,9
Heating Energy Efficiency Class without regulation (according to 813/2013)	B	B	B
Boiler N°2			
Nominal thermal output (kW)	24,6	33,8	33,8
Efficiency Eta1 at 30% load and return 37°C (%)	97,1	97,3	97,3
NOx emissions (mg/kWh)	110	104	104
Seasonal Energy Efficiency Etas (%) of the boiler	86,2	86,9	86,9
Heating Energy Efficiency Class without regulation (according to 813/2013)	B	B	B
Flue pipe diameter (mm)	150	150	150
Flue collector outlet diameter (mm)	200	200	200
Weight without packaging (kg)	296	306	316

Chimney version only



Warranty

Boiler body : 3 years, extended to 10 years under the conditions listed on the first page

Electrical and electronic equipment : 2 years

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Find our catalog-price list, documentation, and more information about all our products at **www.perge.com**

Dealer stamp



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