



Big Dutchman®



307pro & 310pro

The newest generation climate and production computers
for your pig house

307pro and 310pro

Secure, comfortable, brilliantly simple

Big Dutchman's two climate and production computers are a future-proof investment and ideally suited for all types of pig housing, be it for finishers, piglets, sows or boars.

- simple operation via 7-inch or 10-inch touchscreen
- software with simple, easy-to-understand icons
- multi-core processor (310pro) for incredibly high operating speeds
- more than 30 languages available – including yours!
- simple alarm management
- compatible with the BigFarmNet Manager software on your PC and the MyPig app



307pro



310pro

307pro and 310pro are the basis for a climate and production control system that works without fail in your pig house. The computers' outstanding features include:

- Processes that are repeated daily are available at a glance.
- Relevant curve trends are displayed as graphs.
- The modular hardware is easy to extend: you benefit from new functions without having to purchase a new computer.
- Data protection with three levels: settings can only be changed by authorised persons.
- High operational reliability: the Big Dutchman computers continue working without errors, even when not connected to the network.
- Full integration in BigFarmNet: with BigFarmNet Manager, you can remotely control the computers on your farm with your PC or with the app while sitting comfortably at home.

➤ Everything always up-to-date

Easily keep track of everything that's important. Use your computer, your office PC or a mobile device to make inputs – directly in the house, while you are relaxing at home, or even on different farms. All BigFarmNet components update and synchronise in real time.

➤ Everything in one software

Climate control, water, lighting, feeding, and silo and alarm management: comfortable, fast and multilingual.

➤ More security

Your entire production is recorded in one single software, which also means that the

data of all houses is backed up automatically and all alarms are managed centrally. Inputs at the PC and in the app are recorded.

➤ Optimised production, reduced costs

Improve your production results by using efficient analytical tools, and save time and avoid errors thanks to optimised processes.

➤ Reliable and future-proof

Benefit from the fact that all BigFarmNet applications are thoroughly tested in the field and continuously further developed by Big Dutchman.

➤ Only buy what you need

It does not matter whether you have a large farm complex or a smaller, family-owned farm: BigFarmNet meets any requirement and grows with your needs.

➤ Service and support

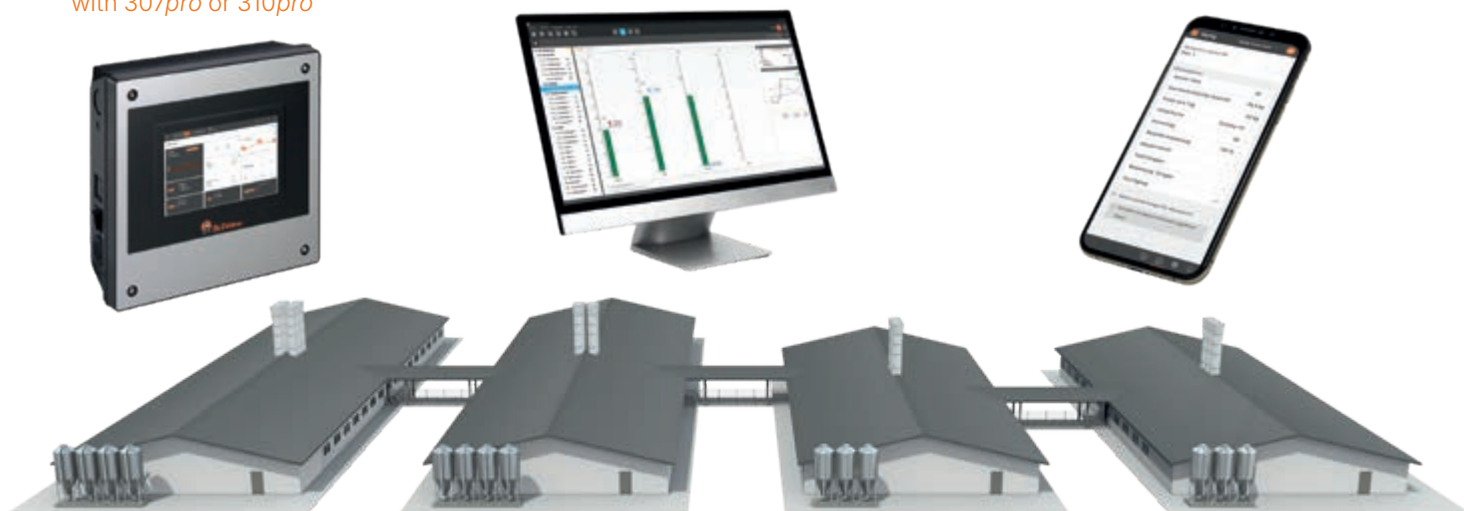
Big Dutchman is happy to support you personally on site, but can also access your computer remotely for maintenance. This can save you time and money if need be.

How to work with BigFarmNet

In the house
with 307pro or 310pro

In the office
with BigFarmNet Manager

Anywhere you are
with the MyPig app



Remote Access: get help remotely and save time and money

Today, it is impossible to imagine the Big Dutchman computers without their remote control and maintenance options. This functionality significantly expands possibilities for direct support.

- the user can continue to work at the farm PC when Big Dutchman is using its remote control option because it is a background feature, protected by a password, of course;
- Big Dutchman service staff and service partners can provide quick and easy support and access the necessary information without having to visit the farm – subject to your approval.



Big Dutchman has the optimal ventilation system. For every customer.

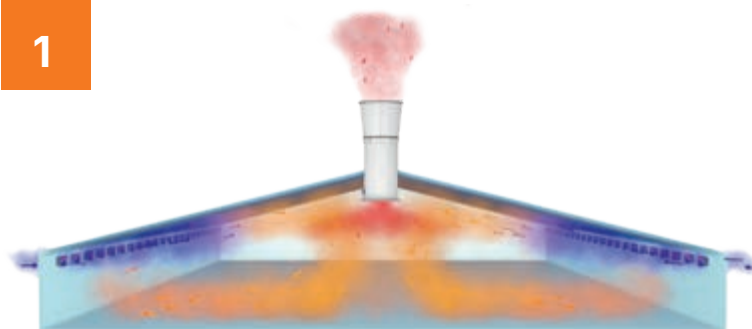
The 307pro and 310pro climate computers fully control your pig house's indoor environment with the most modern methods. The temperature in the house is regulated quickly and precisely to the required level.

New and unique: the principle of **adaptive climate control**. With this method, control

parameters are constantly adapted to the current situation in the house based on a **new self-learning function**. The house climate is thus permanently optimised, which increases productivity and sustainability and improves animal welfare.

Both computers are available for one or two rooms. They can control any standard ventilation system, including fresh air and exhaust air, heating, cooling, the 378 T emergency opening and alarms.

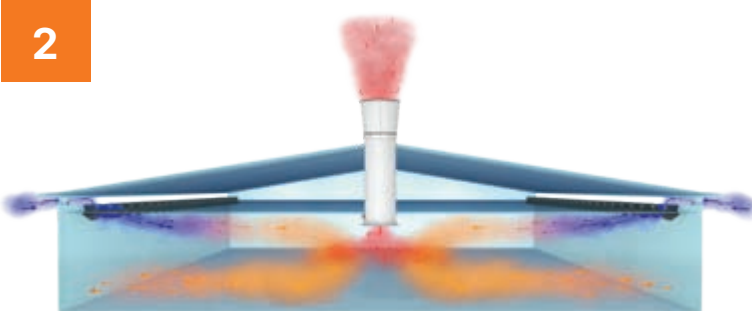
1



Negative pressure ventilation with wall inlets

- wall inlets for fresh air: the advanced inlet control creates a stable air flow, even with minimum ventilation
- the exhaust air is extracted through chimneys positioned on the roof
- possible in houses with and without inserted ceiling constructed below the attic

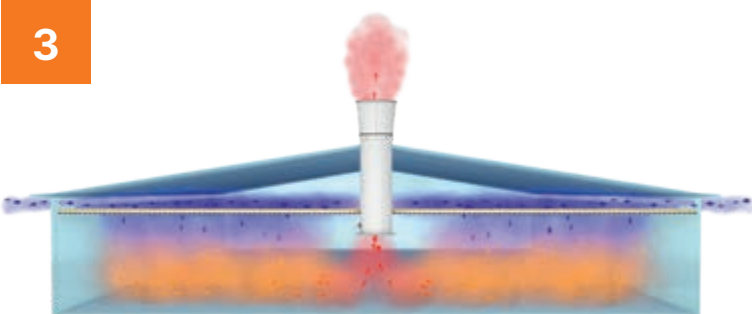
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Negative pressure ventilation with ceiling inlets

- ceiling inlets for fresh air: the advanced inlet control creates a stable air flow, even with minimum ventilation
- the exhaust air is extracted through chimneys positioned on the roof, or through wall fans at one long side of the house
- only possible in houses with inserted ceiling constructed below the attic

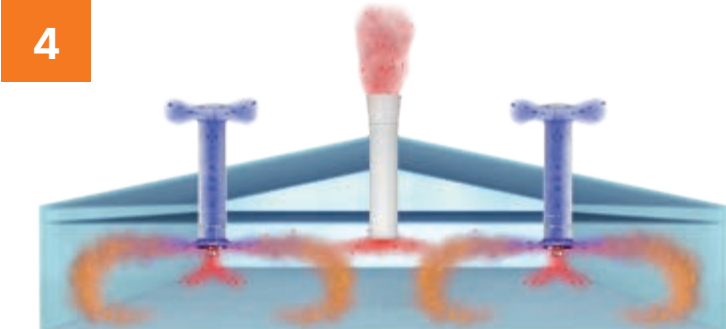
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Negative pressure ventilation with diffuse fresh air

- the fresh air enters slowly throughout the entire ceiling: very even distribution of the fresh air, especially during cold weather
- the created air speeds are very low, i.e. this is an option especially well-suited for piglet rearing
- the exhaust air is extracted through chimneys positioned on the roof

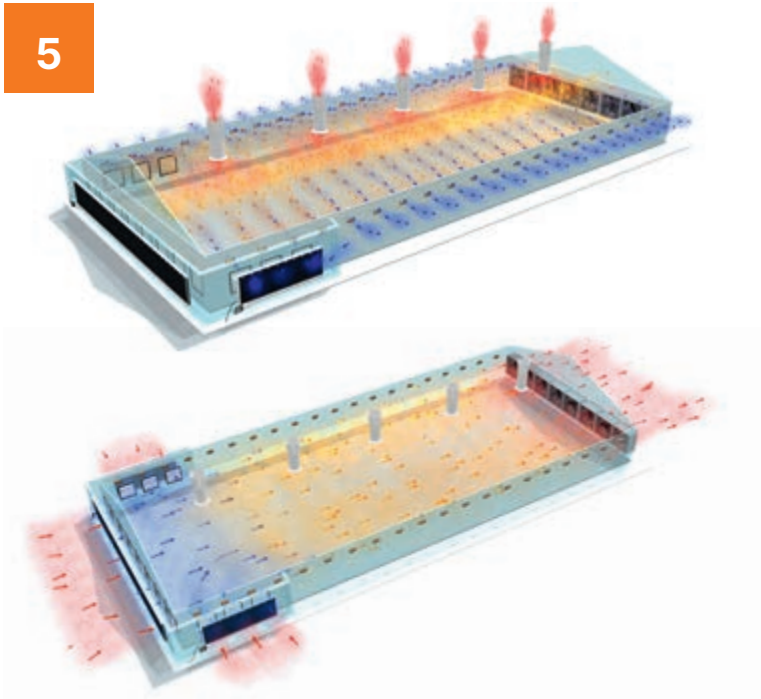
4



Balanced or negative pressure ventilation with fresh air chimneys

- fresh air chimneys: an option for houses where the fresh air cannot be drawn in via the side walls
- the exhaust air is extracted through chimneys positioned on the roof, or through wall fans at the long side of the house
- possible in houses with and without inserted ceiling constructed below the attic

5



CombiTunnel ventilation

Combination of two ventilation systems

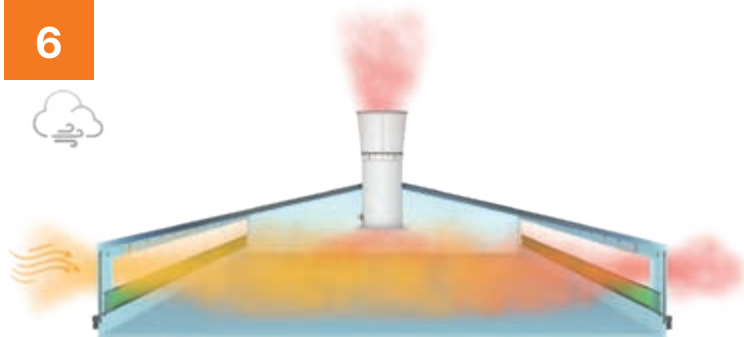
Side mode

- in case of low outside temperatures, fresh air is supplied through wall or ceiling inlets
- the exhaust air is extracted through chimneys or wall fans

Tunnel mode

- the tunnel mode is activated at high outside temperatures
- the tunnel openings are opened as required
- the exhaust air is extracted through wall fans in the gable
- the air speed has a cooling effect (windchill)
- with very high outside temperatures, the pad cooling system (RainMaker II) is also activated

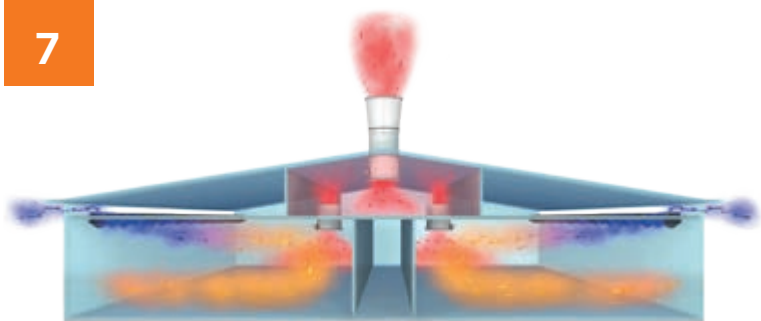
6



Natural ventilation

- the air exchange depends on the wind
- curtains are installed in both sides of the building
- exhaust air chimneys (without fans) are positioned on the roof
- circulation fans can be used for improved air distribution (optional)
- control of the curtains is either based on temperature or additionally on a weather station with rain sensor (irrespective of the side)

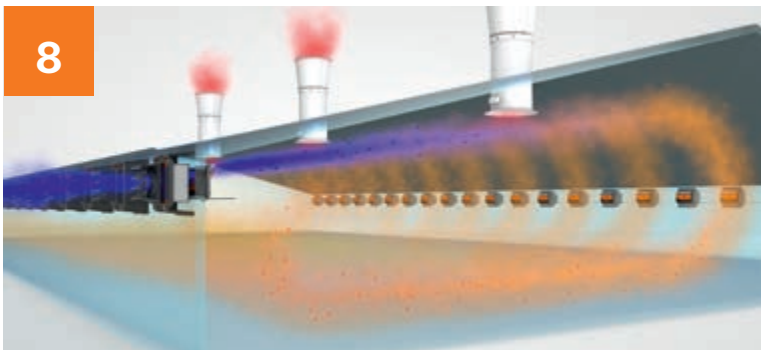
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Central extraction

- with this type of exhaust air extraction, the exhaust air chimneys are either all located at one gable-end or placed centrally on the roof
- central extraction is also installed when using an air cleaning system

8



Fresh air filtration

- wall inlets equipped with mechanical filters, which filter particles up to a size of $0.3 \mu\text{m}$, and energy-saving EC fans for fresh air to ensure a high hygiene status
- the ventilation system works with balanced pressure or slightly positive pressure so no unfiltered fresh air can enter the building through leaks
- possible in houses with and without inserted ceiling constructed below the attic
- easy to retrofit for existing wall inlets

Sensors: the technical basis for data collection

Using sensors for climate control in modern livestock production is now state of the art. Temperature, humidity, CO₂ and

ammonia sensors effectively measure and monitor changes in the house air. These sensors are therefore the basis for any

computer-controlled climate system. Big Dutchman offers a wide variety of suitable sensors.



DOL 12 temperature sensor

DOL 114 sensor for relative humidity

DOL 18 negative pressure sensor

DOL 119 CO₂ sensor

DOL 53 NH₃ sensor

Weather station

Extension stages of 307pro and 310pro

307pro and 310pro are available with different extension stages. You can thus be sure that you will receive the software that exactly fits your pig house.

Controller type	Extension stage	MultiStep groups	Controller type	Extension stage	MultiStep groups
307pro	S1 (small, 1 room)	1	310pro	L1 (large, 1 room)	5
307pro	S2 (small, 2 rooms)	1	310pro	L2 (large, 2 rooms)	5
307pro	CT S1 (CombiTunnel)	4	310pro	N (natural ventilation)	-
307pro	CT S2 (CombiTunnel)	4	310pro	T (tunnel ventilation)	up to 8
307pro	CE (central extraction)	6	310pro	CT+N (CombiTunnel + natural ventilation)	up to 16

What can 307pro and 310pro record and control?

- up to 16 MultiStep groups to reduce power consumption;
- DynamicAir to optimise the air exchange in the building by precisely recording the volume flow in the exhaust air chimney;
- cycle ventilation for minimum ventilation rates;
- different heating systems, on/off or stepless for hot water systems;
- humidity control with/without heat;
- cooling and humidifying;
- extended control based on pre-set curves (temperature, heat, humidity, floor heating, minimum and maximum ventilation rates);
- sequential control of two stepless fan groups;
- ice protection to prevent freezing of the fresh air inlets;
- frost protection for empty houses;
- active control of minimum ventilation rates by means of a CO₂ sensor;
- active pressure control to ensure a high biosecurity in houses with fresh air filtration that are operated under balanced or positive pressure;
- trend curves;
- log file for alarms and operation;
- access code.

Temperature-controlled emergency opening system 378 T

Special attention must be paid to the operational reliability of any ventilation system. For this reason, a fail-safe emergency opening set-up should be installed. The temperature-controlled emergency opening system 378 T helps to ensure survival of the livestock in case of power failures or technical breakdowns. The system comprises a 18 V DC power supply unit with built-in maintenance-free battery and charger and a separate temperature probe. The temperature at which the emergency opening function is to be activated can be

set manually at the 378 T. The fresh air flaps and exhaust air flaps are controlled based on the temperature. The emergency function itself is integrated in the computer. This means that the climate computer monitors the 378 T and triggers an alarm if, for instance, the temperature limit for the emergency opening function is set too high.

In regions with inconsistent power supply, the climate computer's shut-down can be delayed for up to five minutes using the UPS board (optional).



Secure, comfortable, easy: production control

The 307pro and 310pro climate computers from Big Dutchman are also production computers. This means that you can use

both computers to control, for example, your Big Dutchman DryRapid dry feeding system with multiple feed circuits, view

the feed levels of your silos, control the lighting system and check water consumption.

What can 307pro and 310pro record and control?

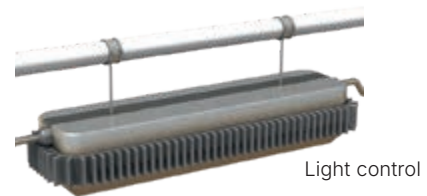
- feed consumption: total, per day and per pig;
- using UniScale, up to four silo scales with up to eight weigh bars each can be connected for easy monitoring of the silo contents;
- feed deliveries are registered and logged;
- automatic silo change;
- the FW 99 feed weigher permits mixing of feed ingredients from up to five different silos;
- feed can be recorded according to the runtime or by a pulse scale;
- opening and closing of volume dispensers;
- multiple feed circuits with DR 1500 and use of FlexFley spirals to transport feed from the silo to the house;
- start of the feed circuits using feeding programs or by pressing a button;
- water consumption: total, per day and per pig with up to eight water meters that can be named;
- light control with infinitely variable dimming, adjustable by means of a light sensor (optional);
- pause function: helps the farmer
- optimise the inter-batch period for soaking, cleaning, drying and heating, thus reducing costs;
- up to four free time switches for individual tasks;
- separate production alarm in case of deviations regarding water and feed consumption, leaks, low feed levels in the silo and power failure;
- free alarms to monitor electrical components such as protective motor switches;
- two energy counters can be connected and named.



Silo weighing with UniScale



FW 99 feed weigher

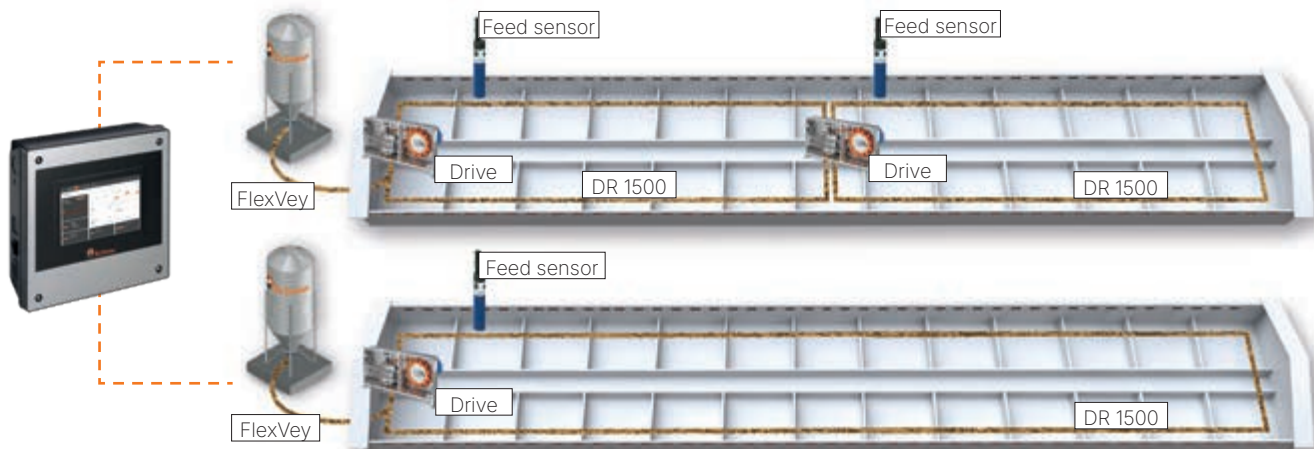


Light control



Water meter

Control of one or more feed circuits with FlexVey and DR 1500





A big help: BigFarmNet lets you adjust the house temperature, the feed quantity and many other parameters easily and quickly, even during the inspection rounds!



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