



Big Dutchman®



ViperTouch

The newest generation climate and production computer for your barn, free range and organic egg production

ViperTouch

Secure, comfortable, brilliantly simple



- > climate and production computer developed specifically for barn, free range and organic egg production
- > brilliantly simple operation via touchscreen
- > selectable operating modes: Flex or Profi
- > efficient quad-core processor
- > speaks 40 languages – including yours!
- > large 10-inch display
- > simple alarm management
- > compatible with BFN Fusion and BigFarmNet Manager



ViperTouch is the principal component for reliable and secure climate and production control in your poultry house! The computer's outstanding features include:

- > **Coloured 10-inch touchscreen:**
Functions used on a daily basis are immediately available in the menu. Relevant curve trends are displayed as graphs.
- > **Optimised user interface:**
All important settings and production figures are available at a glance.

- > **Modular hardware:**
Easy to extend whenever you need new functions.
- > **Software updates,** if necessary, are easy to implement.
- > **Full connectivity:**
Use our cloud solution BFN Fusion or the BigFarmNet Manager software to operate the ViperTouch controllers on your farm comfortably from your phone or PC.

- > **High operational reliability:**
ViperTouch continues working correctly, even when not connected to the network.
- If the standard version is not sufficient, an extension unit that can control up to 40 additional drives is an option. There are also relay modules available that can be used for direct connection of single-phase fans or motors.



Modern control cabinet: good structure, simple operation, high degree of protection, clean look

For new buildings, especially, Big Dutchman can supply a control cabinet that has been optimised for your individual situation. This control cabinet contains all fuses, contactors, protective switches, manual switches, control lamps, alarm devices, etc. for all drives, lights and sensors installed in the house. Such a cabinet can contain the integrated 10-inch version of ViperTouch. The control cabinet is planned and manufactured individually for each project, based on the equipment in the house. Each cabinet's wiring is ready for connection when delivered, i.e. the electrician just has to connect the energy-consuming devices (motors, etc.). In case of defects, error diagnosis is much easier, since the control cabinet comes with detailed plans.

ViperTouch

Secure, comfortable, easy: climate control

ViperTouch is a climate computer that enables you to control the entire house environment according to state-of-the-art principles.

The controller can be used for all established types of ventilation (natural, mechanical and

combined), including negative- and balanced-pressure ventilation, CombiTunnel ventilation and natural ventilation. ViperTouch controls:

- fresh air and exhaust air
- recirculating air

- heating, especially in rearing houses
- air mixers
- cooling
- emergency openings
- alarms

Freely selectable climate control modes

ViperTouch makes it possible to control the house climate in two different modes.

1 Flex mode (flexible control)

In Flex mode, you decide how fresh air and exhaust air settings are combined.

2 Profi mode (advanced control)

Profi mode comes with an **adaptive control**. This means that intelligent control algorithms automatically ensure that all climate components constantly

adjust to the current conditions in the house. The house climate is thus permanently optimised, which ultimately increases productivity and sustainability and also improves bird welfare.

Sensors for climate control and data collection

Using sensors for climate control in modern poultry production is state of the art today. Temperature, humidity, CO₂ and NH₃ 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 is a sensor that determines the temperature inside the house.



DOL 114 is a sensor that measures the relative humidity inside the house. Due to its two analogue 0-10 V outputs, the sensor can also determine the temperature (optional).



The DOL 119 sensor measures the carbon dioxide concentration of the house air. Its high-quality infrared measuring cell is able to detect CO₂ in a range from 0 ppm to 10 000 ppm. This makes it possible to control minimum ventilation based on the CO₂ concentration.



DOL 18 is a negative-pressure sensor that measures the pressure difference between inside and outside air. It emits a 0-10 V signal. Power for this sensor is supplied by ViperTouch.



The DOL 58 weather station allows local weather conditions to be included in the ventilation control calculations. Wind direction, air speed and air pressure are measured for this purpose.

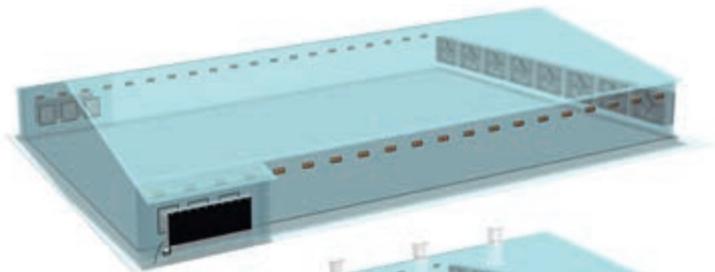


DOL 53 is a sensor that continuously measures the important ammonia concentration in the house air. The sensor is very robust and accurate, with a measuring range from 0 ppm to 100 ppm NH₃.

Examples for ventilation concepts that ViperTouch can control reliably and fully automa

CombiTunnel ventilation for barn egg production

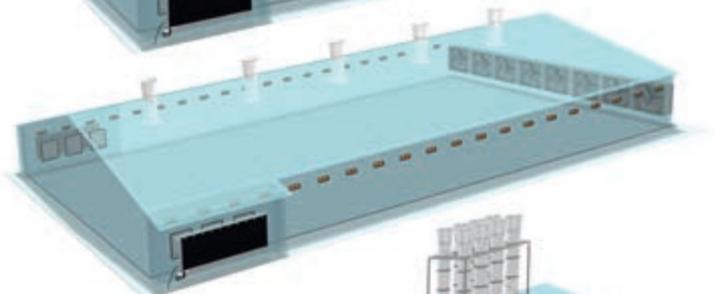
1



Alternative 1

- Wall inlets (fresh air)
- Fans in the gable (exhaust air)
- Shutters in the side walls (fresh air)
- Pad cooling in the side walls (optional cooling)

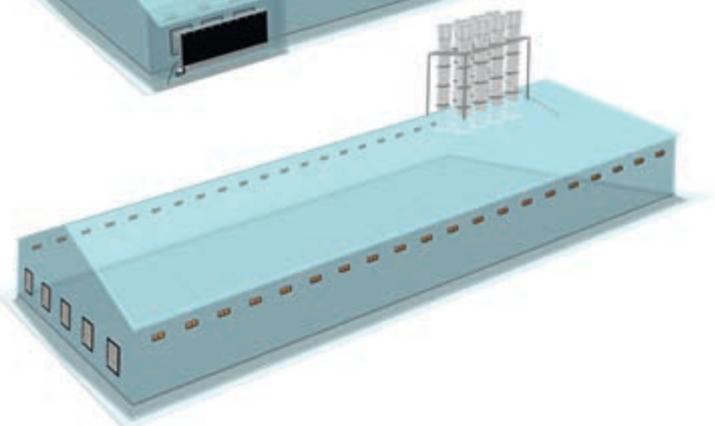
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Alternative 2

- Wall inlets (fresh air)
- Exhaust air chimneys on the roof
- Fans in the gable (exhaust air)
- Shutters in the side walls (fresh air)
- Pad cooling in the side walls (optional cooling)

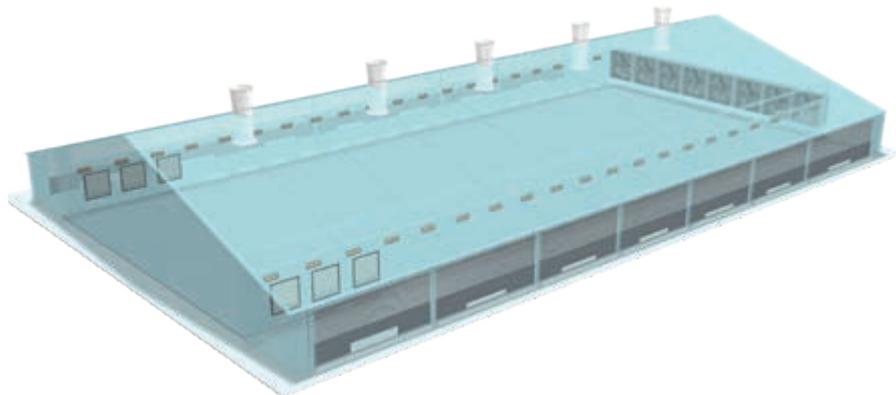
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Alternative 3

- Wall inlets (fresh air)
- Central exhaust air extraction using chimneys or an exhaust air tower
- Shutters in the gable and/or the side walls (fresh air)

Negative-pressure ventilation for free range egg production with winter garden



- Wall inlets (fresh air)
- Exhaust air chimneys on the roof
- Fans in the gable (exhaust air)
- Shutters in the side walls
- Spray cooling (optional cooling)

What can ViperTouch record and control?

- 8 sensors for inside temperature, 2 sensors for inside humidity;
- minimum ventilation in pulse/pause mode (optional);
- "Anti-Ice" (frost protection for fresh air inlets);
- the Dynamic MultiStep exhaust air principle for a ventilation concept that saves even more energy;
- lowered night-time temperature setting;
- integration of circulation fans for air distribution inside the house according to the needs of the birds;
- controlled tunnel ventilation with up to 4 actuators;
- natural ventilation through thermal air flows, taking into account opening of the popholes for free range egg production;
- increased ventilation for dust reduction;
- cooling and humidification;
- display of the cooling temperature via 2 pad temperature sensors (optional);
- heating also available as hot-water heating;
- combination of fresh air from the roof and the side;

Balanced-pressure ventilation for barn egg production

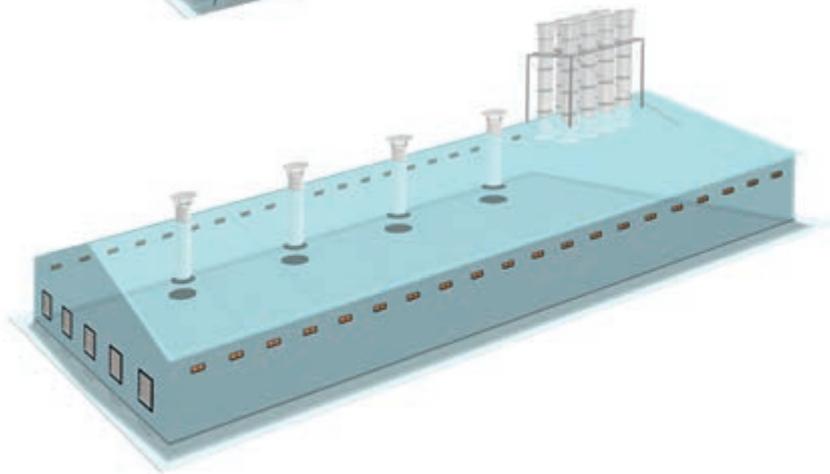
1



Alternative 1

- Fresh air chimneys with fan on the roof (minimum ventilation)
- Wall inlets (fresh air in the summer)
- Fans in the gable (exhaust air)
- Shutters in the side walls
- Pad cooling in the side walls (optional)

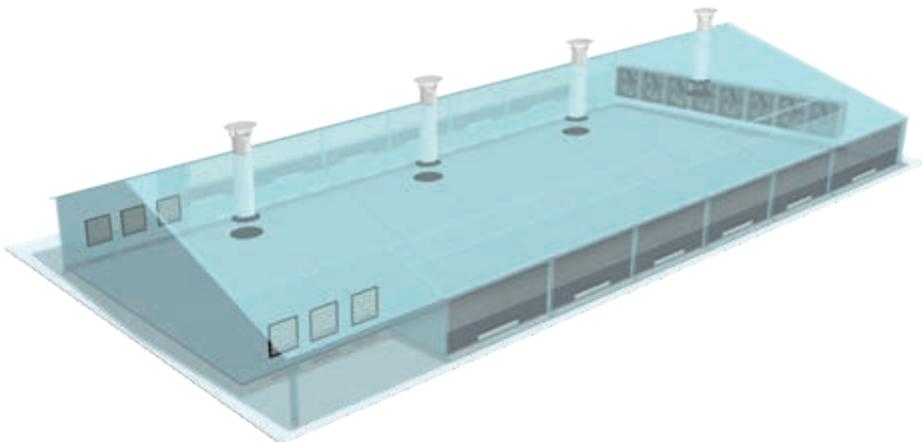
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Alternative 2

- Fresh air chimneys on the roof (minimum ventilation)
- Wall inlets (fresh air in the summer)
- Central exhaust air extraction using chimneys or an exhaust air tower
- Shutters in the gable and/or the side walls

Balanced-pressure ventilation for free range egg production with and without winter garden



- Fresh air chimneys on the roof
- Shutters in the side walls (fresh air)
- Fans in the gable (exhaust air)
- Spray cooling (optional)

- standard step control of the fans in Flex mode (16 steps in side mode and 32 steps in tunnel mode);
- temperature-controlled emergency opening with 378 T or 378 CT;
- connection of a CO₂ and/or NH₃ sensor to regulate minimum ventilation actively based on the CO₂ and/or NH₃ concentration in the house air;

- connection of an additional 16 free sensors, for example for air speed or outside humidity;
- use of Dynamic Air sensors to measure the actual exhaust air volume;
- active negative-pressure control, i.e. the negative-pressure sensor measures the pressure difference between outside air and inside air and regulates the position of

the fresh air flaps accordingly;

- connection of sensors to monitor air cleaning (conductivity and pH value of the wash water);
- natural ventilation using a weather station;
- display of trend curves for the entire batch;
- control of up to 2 air mixers including cleaning program.



“I have everything under my control. ViperTouch regulates my entire rearing house very reliably and accurately. The pullets’ uniformity is very high.”



“ViperTouch controls my whole barn. I can rely fully on this technology.”

ViperTouch

Secure, comfortable, easy: production control for pullet rearing

ViperTouch has not only proven its worth as a climate computer, but has also proved to be a very professional production computer. It records all important data concerning growth as well as feed and water consumption of your pullets. This enables you to react quickly to changes and to take any required action, which, in turn, will lead to better performance results and increase economic efficiency.

Software functions for production control

Big Dutchman offers three software packages. The most essential differences are listed in the table below.

Function	Basic	Medium	Full
<i>Silos with load cells</i>	4	4	4
<i>Number of feed silos with FW 99</i>	2	4	5
<i>Feed mixing</i>	–	✓	✓
<i>Dosing container for additional feed component</i>	–	✓	✓
<i>Number of light groups including dimmer</i>	4	8	8
<i>Number of bird scales</i>	2	4	12
<i>Number of time switches</i>	4	4	10
<i>Number of water meters</i>	1	8	24
<i>Number of drinker lines with level monitoring</i>	4	32	64



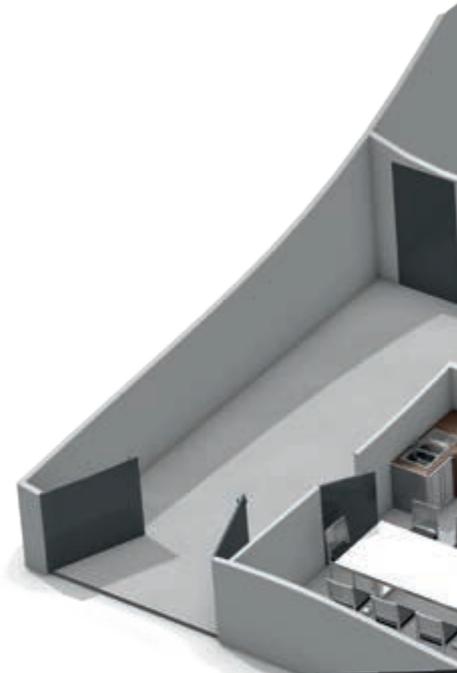
Silo weighing



Automatic flushing system

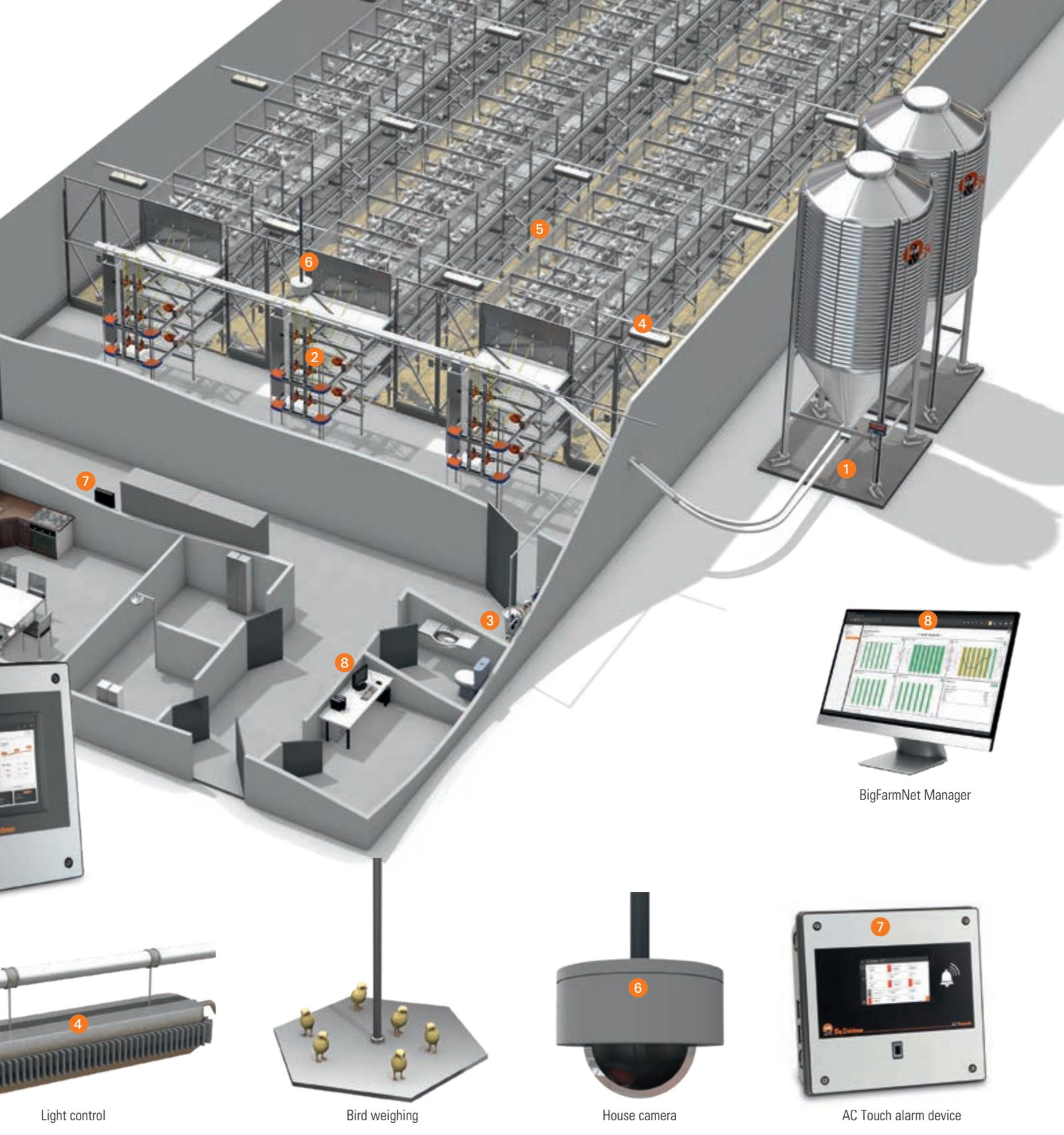


Water consumption



What can ViperTouch record and control?

- feed consumption: total, per day and per bird;
- silo weighing with up to 8 weigh bars per silo using UniScale, QuadScale or weighing modules for easy monitoring of the silo contents;
- the FW 99 feed weigher permits mixing of feed components from up to 5 different silos;
- feed deliveries are registered and logged;
- water consumption: total, per day and per bird with up to 24 water meters;
- light control via 8 different light groups with simulation of the twilight phase for sunrise and sunset; the light intensity and colour temperature can also be changed;
- connection of up to 12 bird scales to record bird weights;



Light control

Bird weighing

House camera

AC Touch alarm device

BigFarmNet Manager

- pause function: helps the farmer optimise the inter-batch period for soaking, cleaning, drying and heating, thus reducing costs;
- catching function to empty the feeding system in a controlled and automatic manner before the birds are moved out while simultaneously allowing individual

configuration of the climate during depopulation;

- 10 free time switches for individual tasks;
- alarm messages in case of power failures, deviations from set values such as temperature, humidity, water and feed consumption, water shortage in the drinker

lines and minimum silo content;

- additional inputs to record how much energy the equipment consumes to help keep an eye on energy costs.

ViperTouch

Secure, comfortable, easy: production control for barn egg and free range egg production

ViperTouch has not only proven its worth as a climate computer, but has also proved to be a very professional production computer. It records all necessary data regarding feed and water consumption, bird weights and laying performance. This enables you to react quickly to changes and to take any required action, which in turn will increase both egg production and economic efficiency. ViperTouch can, moreover, be configured just the way you want it to be. Manual inputs, e.g. for egg weights, are also possible to enhance your documentation.

Software functions for production control

Big Dutchman offers three software packages. The most essential differences are listed in the table below.

Function	Basic	Medium	Full
<i>Silos with load cells</i>	4	4	4
<i>Number of feed silos with FW 99</i>	2	4	5
<i>Feed mixing</i>	–	✓	✓
<i>Dosing container for additional feed component</i>	–	✓	✓
<i>Number of light groups including dimmer</i>	4	8	8
<i>Number of bird scales</i>	2	4	12
<i>Number of time switches</i>	4	4	10
<i>Number of water meters</i>	1	8	24
<i>Number of egg counters</i>	1	8	128
<i>Number of drinker lines with level monitoring</i>	4	32	64



Silo weighing with UniScale



Calcium source dispenser



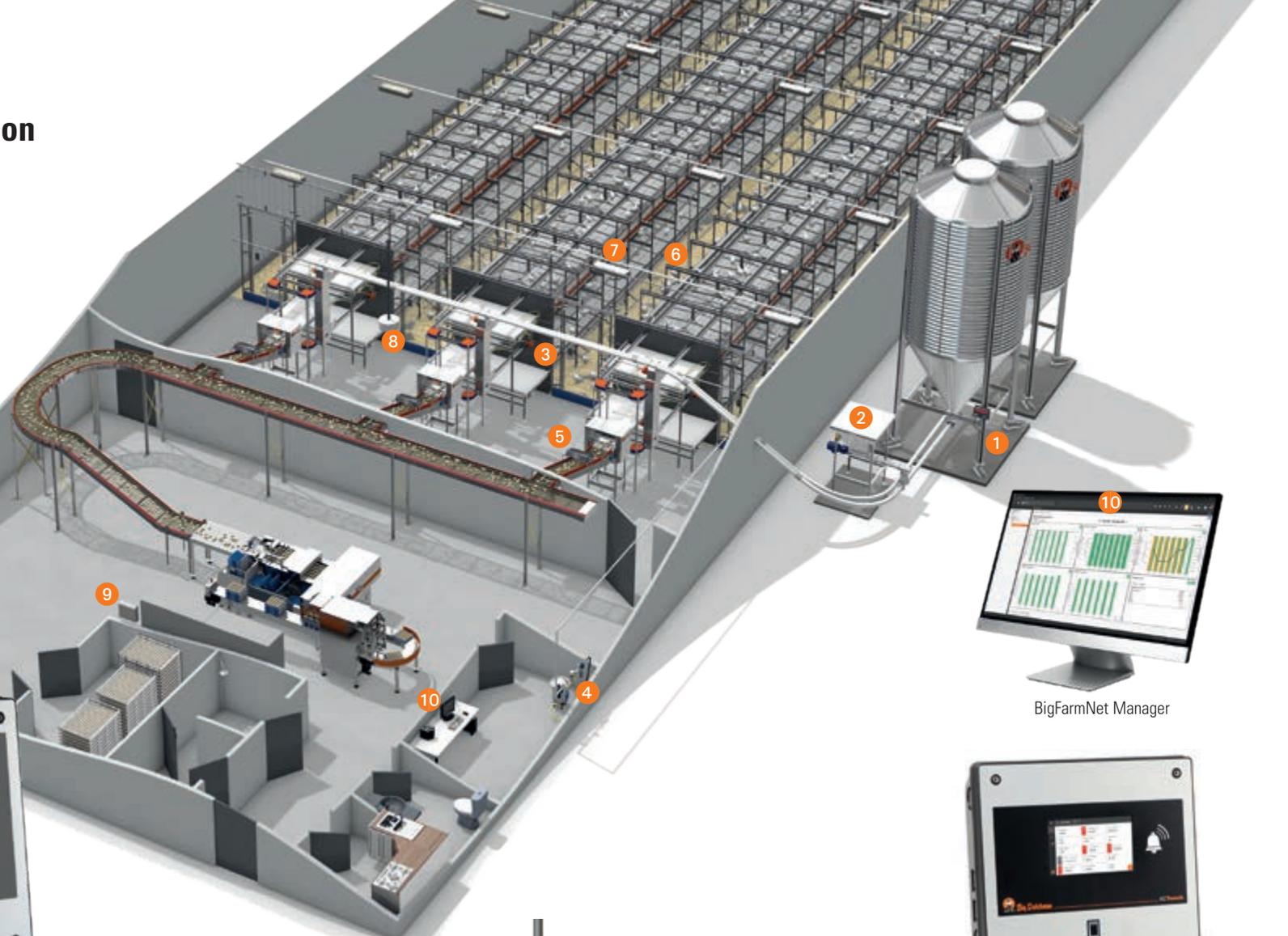
Automatic flushing system



Water consumption

What can ViperTouch record and control?

- feed consumption: total, per day and per bird;
- silo weighing with up to 8 weigh bars per silo using UniScale, QuadScale or weighing modules for easy monitoring of the silo contents;
- mixing of up to 5 feed components with the FW 99 feed weigher, including a calcium source for the final feeding;
- accurate consideration of the layers' daily rhythm regarding feed, water, light and behaviour;
- feed can be supplied to different tiers at different times to ensure need-based feeding;
- water consumption: total, per day and per bird with up to 24 water meters that can be named;
- control of the automatic flushing system by means of special pressure regulators;
- monitoring of the water level in the drinker lines;



BigFarmNet Manager



AC Touch alarm device



Egg counter



Bird weighing with SWING 20



Light control



House camera

- registration of up to 128 egg counters;
- connection of up to 12 bird scales to record bird weights;
- light control via 8 different light groups with sequential simulation of the twilight phase for sunrise and sunset; the light intensity and colour temperature can also be changed;

- 10 free time switches for individual tasks such as opening and closing the nests or the popholes for free range egg production;
- additional manual inputs, e.g. egg weights, complete the documentation; the data are immediately available in BigFarmNet Manager;
- additional inputs to record how much

- energy the equipment consumes to help keep an eye on energy costs;
- alarm messages in case of power failures, deviations from set values such as temperature, humidity, water and feed consumption, water shortage in the drinker lines and minimum silo content.

MAKE DATA-BASED DECISIONS ACHIEVE PREDICTABLE RESULTS

The first BigFarmNet licence was activated in 2010. Today, more than 25,000 licences worldwide are active in pullet rearing and egg production houses alone. This is proof that digitalisation helps optimise production. And development still continues, of course. For BigFarmNet, this means upgrading to a cloud-based solution: **BFN Fusion**.

With BFN Fusion, you can access your data from anywhere in the world and with any device: use your smartphone, tablet, laptop or PC to control your computers remotely. The user interface is easy to use and very intuitive. **BFN Fusion** provides you with the full overview and control of your production, at all locations and in real time, making sure that you stay safely on track for success.

➤ Everything always up-to-date

Use your ViperTouch controller, your PC or a mobile device to make inputs – directly in the house, while you are relaxing at home or even on different farms. BFN Fusion updates automatically on all devices.

➤ Safe and neutral data storage

The BFN Fusion cloud stores your data safely and makes them accessible at any time. Your data belongs to you!

➤ 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 BFN Fusion applications are thoroughly tested in the field and continuously developed by Big Dutchman. Big Dutchman ensures stability, connectivity and constant improvement of the system.

➤ Only buy what you need

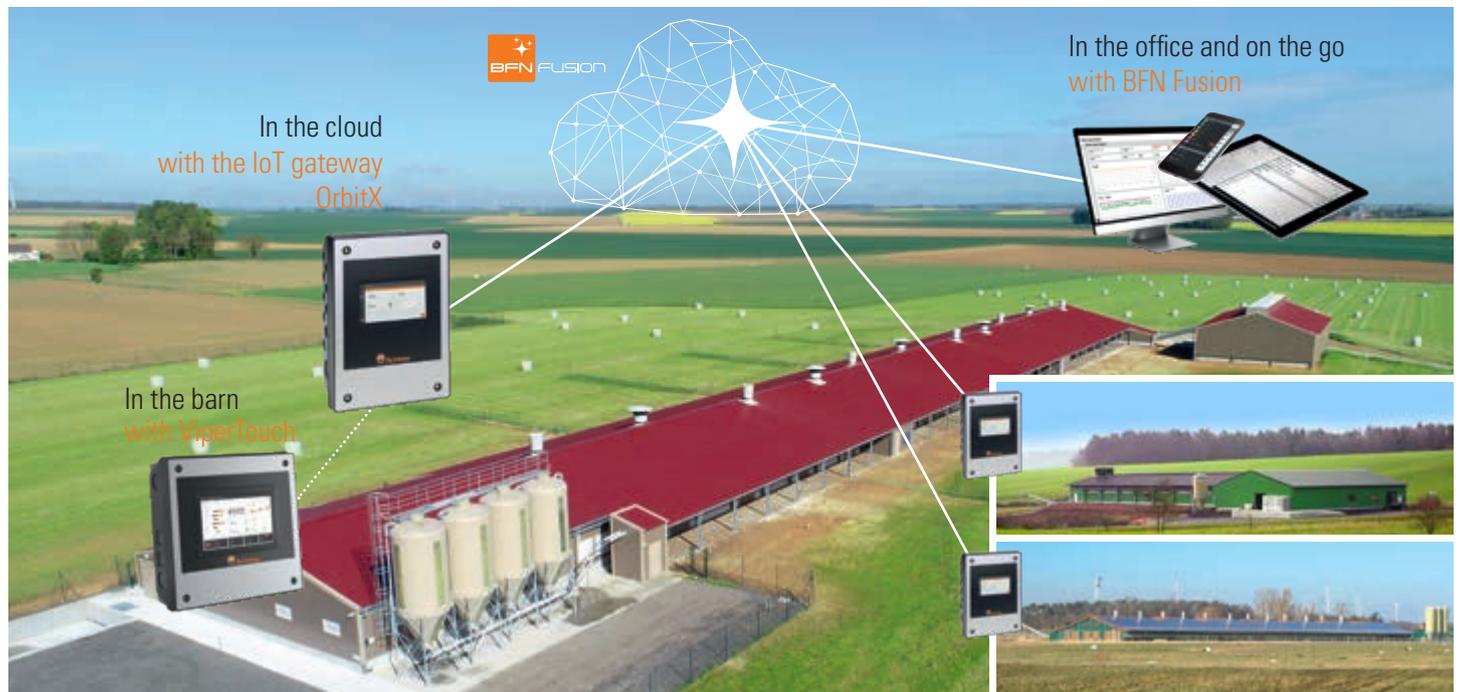
It does not matter whether you have a large farm complex or a smaller, family-owned farm: BFN Fusion meets any requirement and grows with your needs.

➤ Service and support

We are happy to support you personally on site, but can also access your ViperTouch controller remotely for maintenance. This can save you time and money.

The future has a name: BFN Fusion

The innovative software that securely monitors your entire value chain



If required, additional farms at other locations can be included



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