



# Big Dutchman®



## ViperTouch

The newest generation climate and production computer  
for poultry growing and breeders

# ViperTouch

Secure, comfortable, easy



- > climate and production computer developed specifically for poultry growing: broilers, turkeys, ducks and breeders
- > 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 relevant and 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 without errors, 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, we can supply a control cabinet that has been optimised for your individual situation. This control cabinet contains all fuses, residual-current devices, motor protection switches, contactors, switches, control lamps, alarm devices, etc., for all system parts 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 consumers (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). This includes side, cross, tunnel and CombiTunnel ventilation. ViperTouch controls:

- fresh air and exhaust air
- recirculating air

- heating
- heat exchanger
- cooling
- emergency opening
- 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 ensure that all climate components constantly and automatically 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: the technical basis for data collection

Using sensors for climate control is state of the art today. Temperature, humidity, CO<sub>2</sub> and NH<sub>3</sub> 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 CO<sub>2</sub> in a range from 0 to 10,000 ppm. This makes it possible to control minimum ventilation based on the CO<sub>2</sub> concentration.



DOL 18 is a negative-pressure sensor that actively measures the pressure in the house, emitting a 0-10 V signal. Power for this sensor is supplied by ViperTouch.



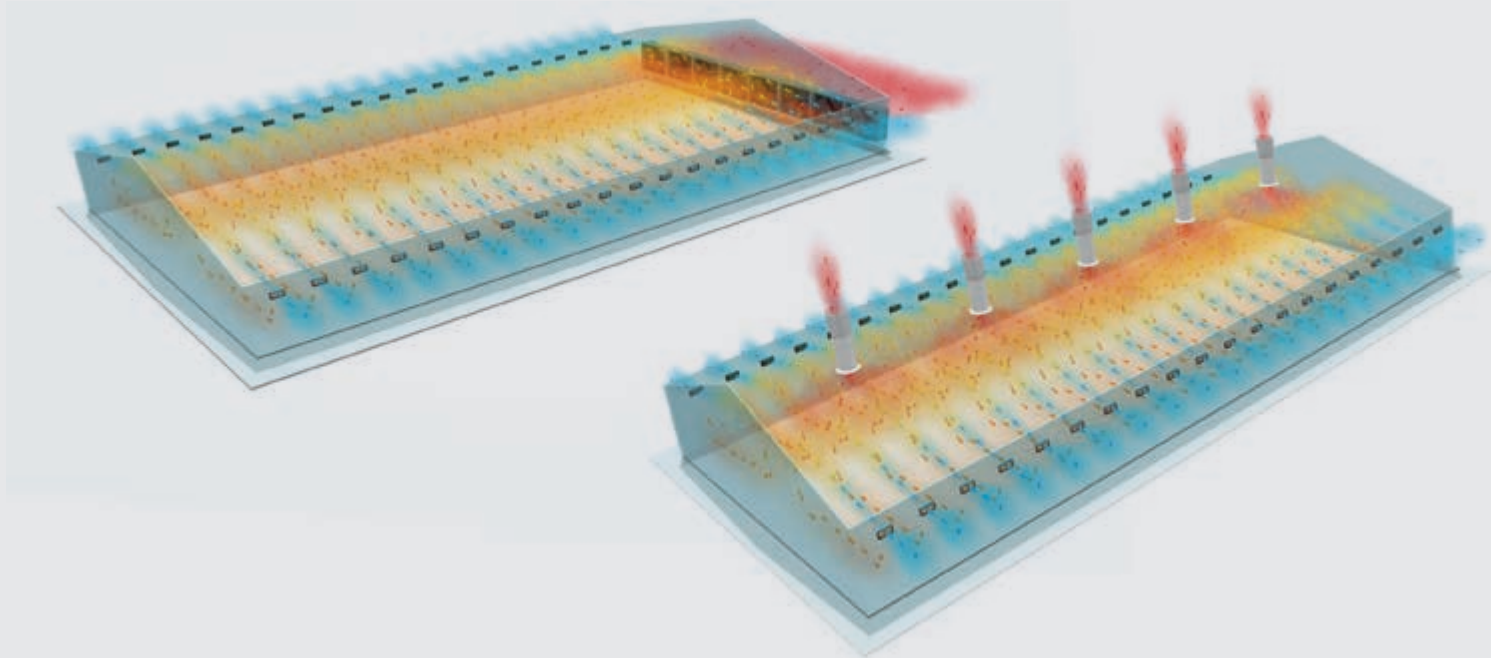
The weather station allows local weather conditions to be included in the ventilation control calculations. Wind direction, air speed and air pressure are measured for this purpose.



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 to 100 ppm NH<sub>3</sub>.

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

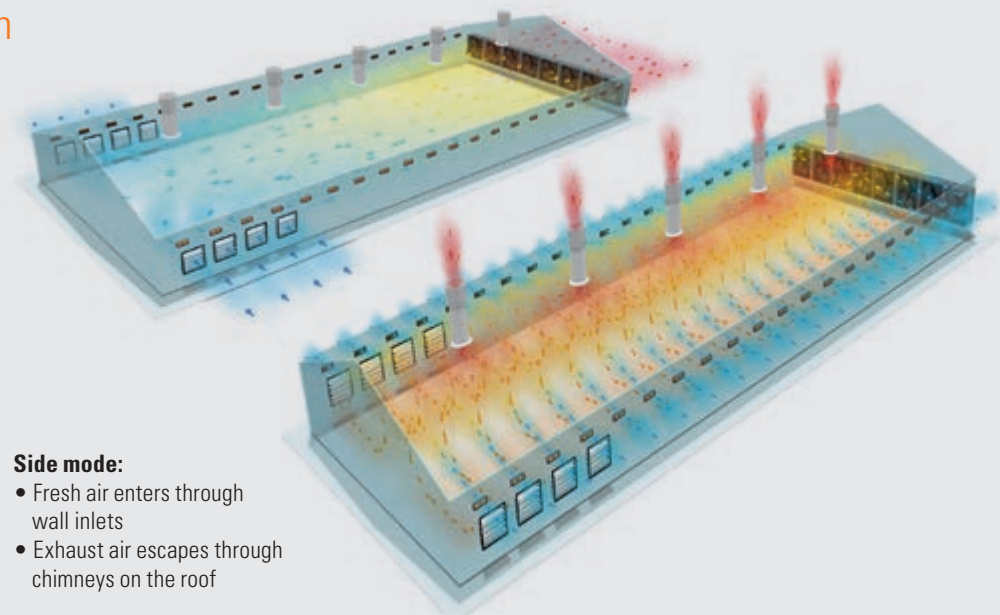
## Side ventilation with wall inlets



## CombiTunnel ventilation

### Tunnel mode:

- Fresh air enters through the tunnel opening with pad cooling
- Exhaust air escapes through fans in the gable



### Side mode:

- Fresh air enters through wall inlets
- Exhaust air escapes through chimneys on the roof

## What can ViperTouch record and control?

- 8 sensors for inside temperature, 2 sensors for inside humidity;
- room heating in up to 6 zones;
- 2 separate climate zones per house with individual control;
- standard step control of the fans in Flex mode (16 steps in side mode and 32 steps in tunnel mode);
- 2 different “brooding zones” per house: one

part is heated while temperatures in the other part are kept just above the point of freezing;

- 4 zone heaters (gas brooders or stand-alone heaters);
- up to 16 MultiStep groups (in side mode and tunnel mode);
- minimum ventilation in pulse/pause mode;
- the Dynamic MultiStep exhaust air principle

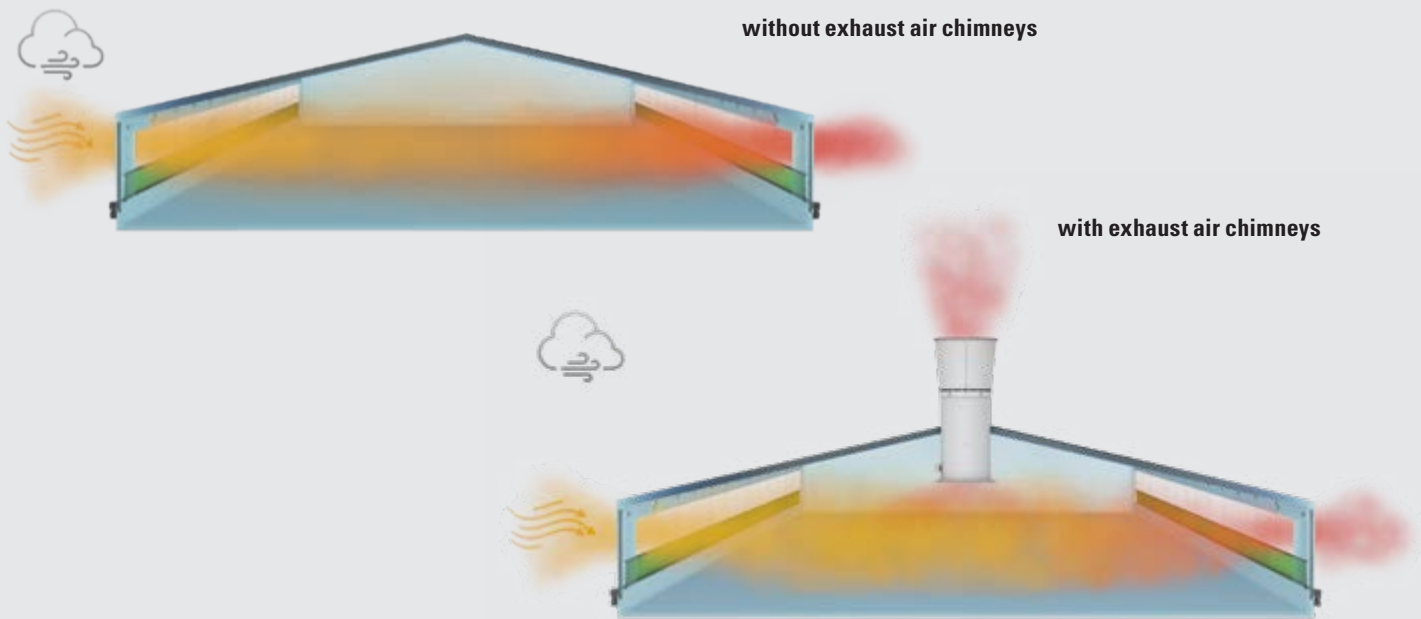
for a ventilation concept that saves even more energy;

- controlled tunnel ventilation with up to 4 actuators;
- different options for humidity control (ViperTouch increases ventilation or heating adaptively based on inside and outside humidity to prevent moist litter);
- lowered night-time temperature setting;

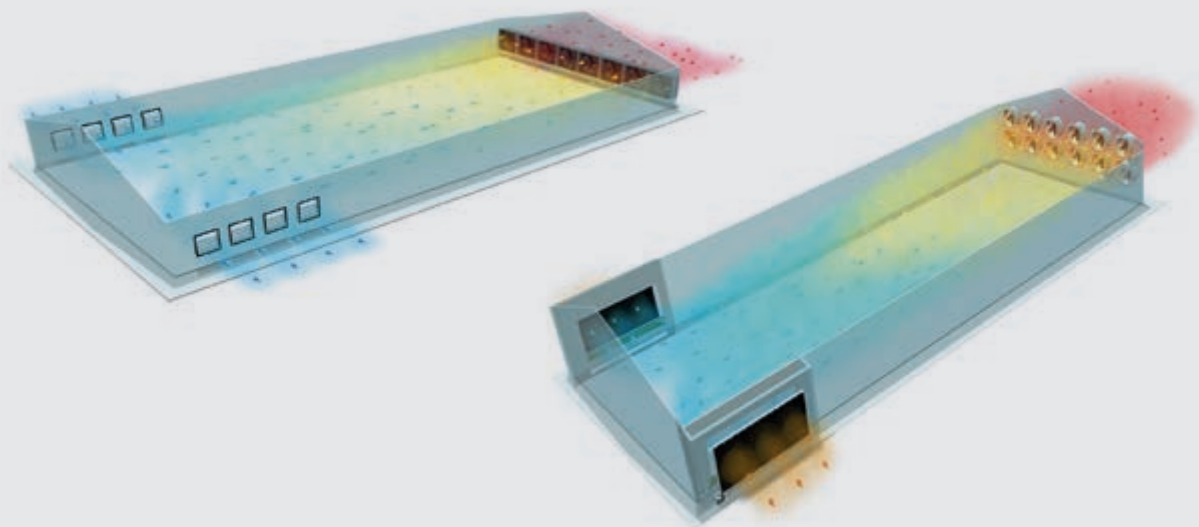


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## Natural ventilation with curtain control



## Tunnel ventilation with and without pad cooling



- cooling and humidification;
- display of the cooling temperature via 2 pad temperature sensors (optional);
- the Earny 2 heat exchanger, which is integrated into ventilation control;
- temperature-controlled emergency opening with 378 T or 378 CT;
- optimised comfort temperature control that takes into account the air humidity;
- connection of a CO<sub>2</sub> and/or NH<sub>3</sub> sensor to regulate minimum ventilation actively based on the CO<sub>2</sub> and/or NH<sub>3</sub> concentration in the house air;
- connection of additional free sensors, for example for air speed and current consumption of the ventilation system including alarms;
- active negative-pressure control, i.e. the negative-pressure sensor measures the pressure difference between outside air and inside air;
- natural ventilation using a weather station;
- connection of sensors to monitor air cleaning (conductivity and pH value of the wash water);
- display of trend curves for the entire batch.



“My computer controls the entire broiler house, including Earny. The heat exchanger helps me save heating costs, and my birds are healthier.”



“ViperTouch controls my whole broiler breeder house. I can fully rely on this control system.”



# ViperTouch

## Secure, comfortable, easy: production control for poultry growing

ViperTouch is not only a state-of-the-art climate computer, but also a very professional production computer. It records all the important data regarding growth, feed and water consumption and mortality of your stock (broilers, turkeys, ducks). 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.

### Extension module “Full Growing”

With the extension module “Full Growing”, Big Dutchman offers additional and important functions for poultry growing. The most essential ones are listed in the table below.

Function	Standard Growing	Full Growing
<b>Number of feed silos with FW 99-B</b>	2	5
<b>Feed mixing with FW 99-B</b>	–	✓
<b>Number of light groups</b>	4	4
<b>Number of light sensors</b>	–	5
<b>Number of bird scales</b>	2	12
<b>Number of weighed silos</b>	–	5
<b>Number of time switches</b>	4	10
<b>Number of water meters</b>	6	24
<b>Number of drinkers with autom. flushing</b>	32	32
<b>Alarm water fill level</b>	64	64



Silo weighing with UniScale



Feed weighing

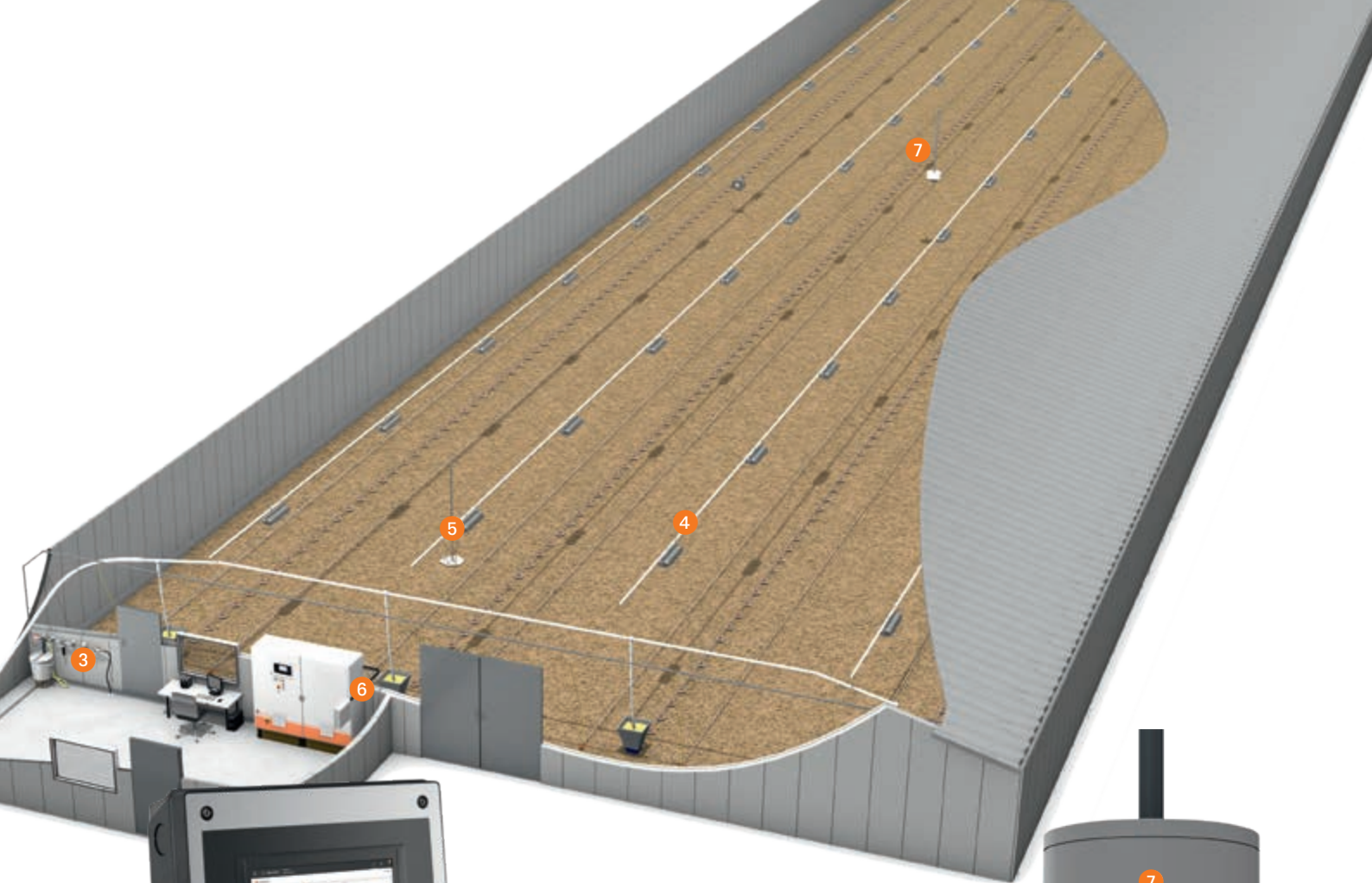


Water consumption

### 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;
- feed deliveries are registered and logged;
- the FW 99-B feed weigher permits mixing of feed components from up to 5 different silos (additional wheat feeding);
- water consumption: total, per day and per bird with up to 24 water meters;
- connection of up to 12 bird scales to record bird weights;
- up to 4 different light groups with twilight phase for sunrise and sunset; the light intensity and colour temperature can also be changed;





House camera



Light control



Bird weighing



AC Touch alarm device

- pause function: helps the producer optimise the inter-batch period for soaking, cleaning, drying and heating, thus reducing costs;
- up to 8 free time switches for individual tasks;
- 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;

- alarm messages in case of power failures, deviations from set values such as temperature, humidity, water and feed consumption, and minimum silo content.

# ViperTouch

## Secure, comfortable, easy: production control for breeder management

ViperTouch is not only a state-of-the-art climate computer, but also a very professional production computer. It records all the important data regarding bird weights, feed and water consumption and mortality of your breeders. This enables you to react quickly to changes and to take any required action, which, in turn, will increase both the production of hatching eggs and economic efficiency.

### Extension module “Full Breeder”

With the extension module “Full Breeder”, Big Dutchman offers additional, important functions for hatching egg production. The most essential ones are listed in the table below.

Function	Basic Breeder	Full Breeder
Number of feed silos with FW 99-B	5	5
Feed mixing with FW 99-B	✓	✓
Number of feeding destinations – breeders	8	24
Number of actuators to lift and lower feed lines	12	12
Number of light groups	7	7
Number of light sensors	5	5
Number of bird scales	2	12
Number of weighed silos	5	5
Number of time switches	10	10
Number of water meters	8	24
Number of drinkers with autom. flushing	32	32
Alarm water fill level	64	64
Number of egg counters	–	32



- a Separate male feeding line with MaleChain
- b Separate male feeding line with MalePan



Silo weighing



Destination feeding with pneumatic feed valve



Feed weighing



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;
- control of destination feeding: up to 24 hoppers per house can be filled with a defined quantity of feed, for example for separate male feeding;
- the FW 99-B feed weigher permits mixing of feed components from up to 5 different silos;
- the height of the feed lines can be adjusted depending on the birds' age, including the filling and parking position;
- water consumption: total, per day and per bird with up to 24 water meters;
- registration of up to 32 egg counters;





AC Touch alarm device

House camera

Light control

Egg counter

Bird weighing with SWING 20

Bird weighing with Nesca

- connection of up to 12 bird scales to record bird weights;
- up to 8 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, and minimum silo content.
- up to 7 different light groups with twilight phase for sunrise and sunset; the light intensity and colour temperature can also be changed;
- pause function: helps the farmer optimise the inter-batch period for soaking, cleaning, drying and heating, thus reducing costs;



# MAKE DATA-BASED DECISIONS ACHIEVE PREDICTABLE RESULTS

The first BigFarmNet licence was activated in 2010. Today, more than 40,000 licences worldwide are active in broiler and broiler breeder 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 further developed by Big Dutchman. Big Dutchman ensures stability, connectivity and continuous development 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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