Viper**Touch**

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

Viper**Touch**

Secure, comfortable, brilliantly simple

> computer developed specifically for barn, free range and organic egg production
> brilliantly simple operation via 7-inch or 10-inch touch screen
> quad-core processor – extremely fast
> speaks more than 30 languages – including yours!
> customisable home screen
> simple alarm management
> future-proof investment
> compatible with the BigFarmNet Manager software on your PC or the BigFarmNet app

ViperTouch is the basis for reliable and secure climate and production control in your barn! Its outstanding features include:

- **Coloured 7-inch or 10-inch touch screen**: Processes that are repeated daily are available at one glance. Relevant curve trends are displayed as graphs.
- **Customisable user interface:** You can design the display just as you require and prefer.
- **Modular hardware:** Easy to extend whenever you need new functions.

- **Easy software updates:** Benefit from new functions without having to replace the computer.
- **Full integration with BigFarmNet:** With BigFarmNet Manager, you can remote-control the computers on your farm with your PC or using the app while sitting comfortably at home.
- **Data protection with five levels**
- **High operational reliability:** ViperTouch continues working without errors, even when not connected to the network.

If the standard version is not sufficient, the computer can be upgraded with extension boxes. An additional 10 to 40 relays can be installed in these boxes. There are also relay modules available that can be used for direct connection of single-phase fans or motors.

Today's larger barns, especially new buildings, are often equipped with a control cabinet. 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 7-inch or 10-inch version of ViperTouch. The control cabinet is planned and manufactured individually for each project, based on the equipment in the barn. Each cabinet's wiring is ready for connection upon supply, 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.

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

Viper**Touch**

Secure, comfortable, easy: climate control

Use ViperTouch to control your entire house environment according to state-of-the-art principles.
The controller can be used for all established types of ventilation, including negative-pressure and balanced-pressure ventilation and CombiTunnel ventilation. ViperTouch controls:

- fresh air
- exhaust air
- heating, especially in the rearing house
- air mixers
- cooling
- emergency opening
- alarms

Freely selectable climate control modes

ViperTouch makes it possible to control the house climate in three different modes, which the user can select at his discretion:

1. **Basic mode** (simple control)
   Simple ventilation systems can be controlled via Basic mode with a thermostat function.

2. **Flex mode** (flexible control)
   In Flex mode, the combination of fresh air and exhaust air can be defined individually.

3. **Profi mode** (advanced control)
   Profi mode allows you, for example, to use PID control (a very precise system for temperature control), to display the perceived temperature with active tunnel ventilation or to view the exhaust air volume in m^3/h/bird.

Sensors: the technical basis for data collection

Using sensors for climate control in modern poultry production is state of the art today. Temperature, humidity, CO_2 and NH_3 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 barn.

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

The DOL 19 sensor measures the carbon dioxide concentration of the house air. Its high-quality infrared measuring cell is able to detect CO_2 in a range from 0 to 10,000 ppm. It is thus possible to control minimum ventilation based on the CO_2 concentration.

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


DOL 53 is a sensor that continuously measures the ammonia concentration in the house air. The sensor is very robust and accurate, with a measuring range from 0 to 100 ppm NH_3.

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

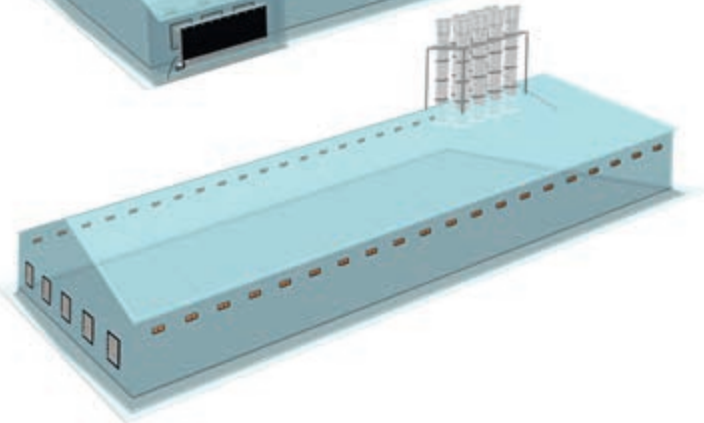# CombiTunnel ventilation for barn egg production

1
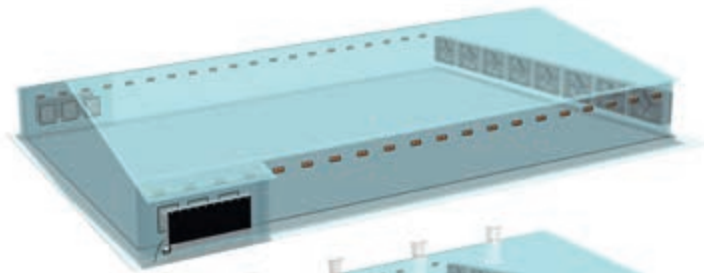
Alternative 1
- Wall inlets (fresh air)
- Fans in the gable (exhaust air)
- Shutters in the side walls (fresh air)
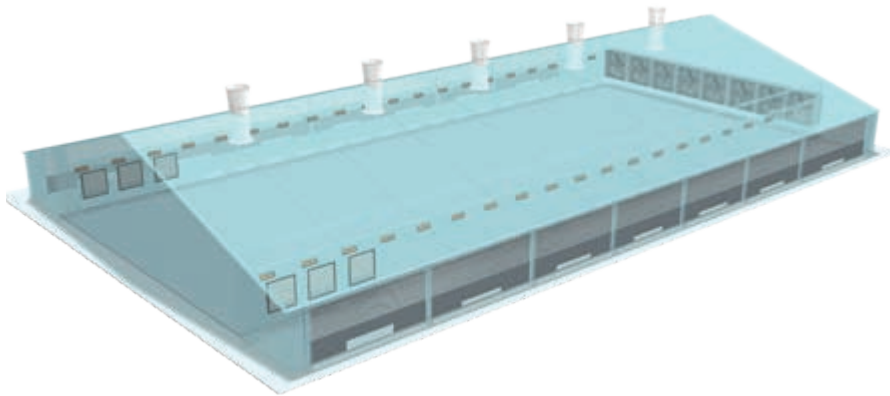- Pad cooling in the side walls (cooling optional)

2

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 (cooling optional)

3

Alternative 3
- Wall inlets (fresh air)
- Central exhaust air extraction (> 10 m above the ridge or exhaust air tower)
- Shutters in the gable and/or the side walls (fresh air)
- Pad cooling in the side walls (cooling optional)

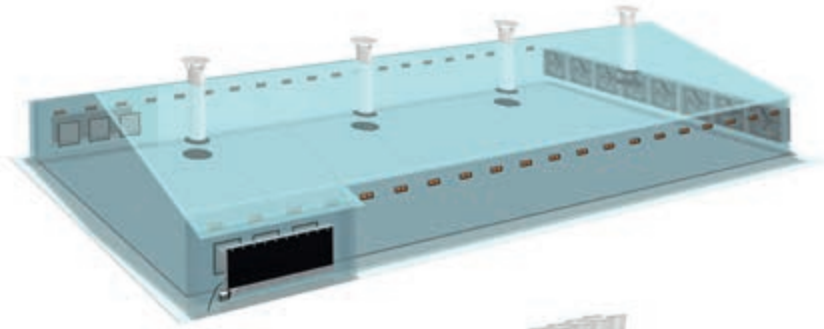# Negative-pressure ventilation for free range production with winter garden

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

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;

- night setback of the temperature;
- controlled tunnel ventilation with up to 4 actuators;
- ventilation through thermal air flows, which takes into account the pophole openings for free range egg production;
- increased ventilation for dust reduction;
- cooling and humidifying;

- 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;
- standard step control of the fans in Basic and Flex mode (16 steps in side mode and 32 steps in tunnel mode);

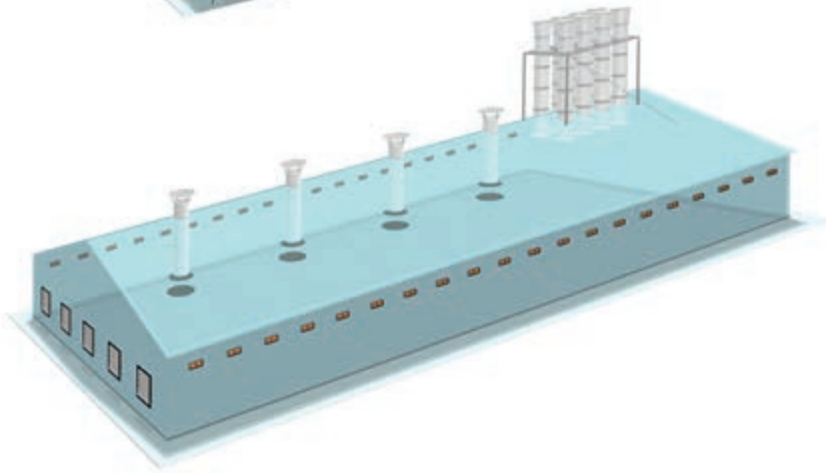# Balanced-pressure ventilation for barn egg production

Alternative 1
- Fresh air chimneys on the roof (minimum ventilation in the winter)
- Wall inlets (fresh air in the summer)
- Fans in the gable (exhaust air)
- Shutters in the side walls
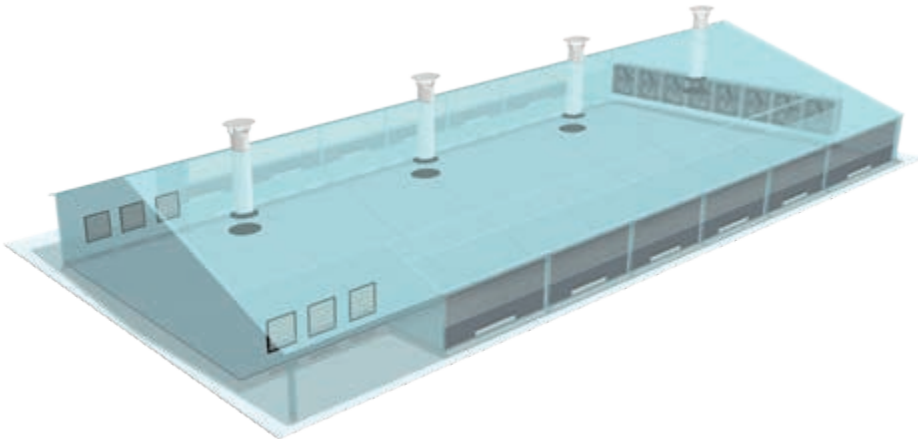- Pad cooling in the side walls (optional)

Alternative 2
- Fresh air chimneys on the roof (minimum ventilation in the winter)
- Wall inlets (fresh air in the summer)
- Exhaust air chimneys (central exhaust air extraction > 10 m above the ridge or 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)

- temperature-controlled emergency opening with 378 T or 378 CT;

- connection of a CO_2 and/or NH_3 sensor to regulate minimum ventilation actively based on the CO_2 and/or NH_3 concentration in the house air;

- connection of an additional 16 free sensors, for example for air speed, outside humidity or NH_3;

- use of Dynamic Air sensors to measure the actual exhaust air;

- 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;

- natural ventilation using a weather station;

- connection of sensors to monitor exhaust air treatment (conductivity and pH value of the wash water);

- 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 therefore very high."

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

Viper**Touch**

Secure, comfortable, easy: production control for pullet rearing for barn egg production

ViperTouch has not only proven its worth as a climate computer, but it is also a very professional production computer. It records all important data concerning growth and feed and water consumption of your pullets. This enables you to react quickly to changes and to take the 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
Silos with load cells	4	4	4
Number of feed silos with FW 99	2	4	5
Feed mixing	–	✔	✔
Dosing container for additional feed component	–	✔	✔
Number of dimmers	4 (1+3)	8	8
Number of bird scales	2	4	12
Number of time switches	4	4	10
Number of water meters	1	8	24
Number of water lines with level monitoring	4	32	64

Silo weighing


Automatic rinsing system

Water consumption

What can ViperTouch record and control?

- feed consumption: total, per day and per bird;
- using UniScale, up to 4 silo scales with up to 8 weigh bars each can be connected for easy monitoring of the silo contents;
- feed deliveries are registered and logged;

- the FW 99 feed weigher permits mixing of feed components from up to 5 different silos;
- water consumption: total, per day and per bird with up to 24 water meters that can be named;

- 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 luminous intensity and colour temperature can also be changed;

BigFarmNet Manager
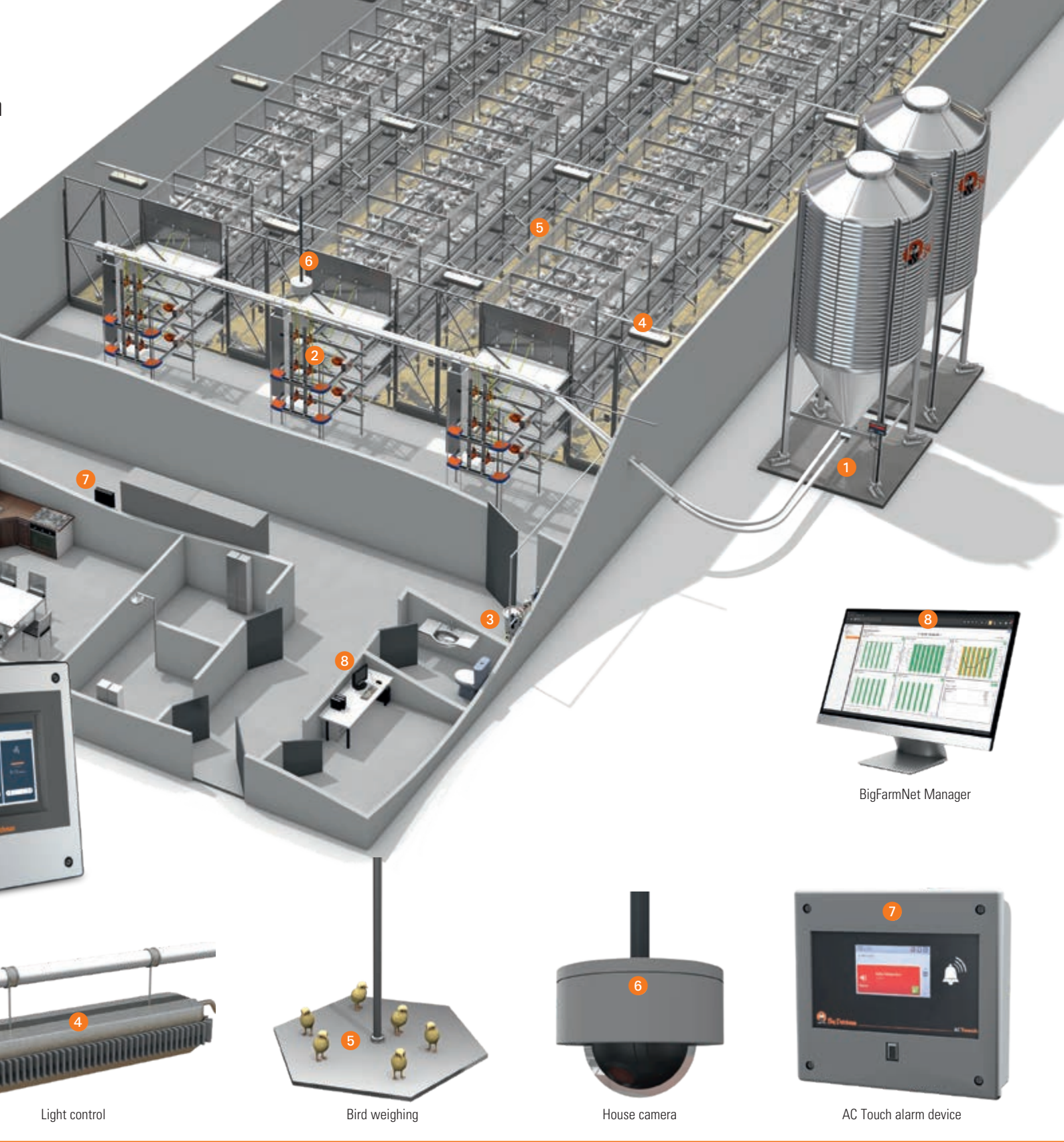
Light control

Bird weighing

House camera

AC Touch alarm device

- pause function: helps the farmer optimise the period for soaking, cleaning, drying and heating between batches, thus reducing costs;
- 10 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 for example in case of power failures, deviations from set values

such as temperature, humidity, water and feed consumption, water shortage in the feed lines and minimum silo content.

Viper**Touch**

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 it is also a very professional production computer. It records all important data regarding feed and water consumption, bird weights and laying performance. This enables you to react quickly to changes and to take the 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 as an addition for 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
Silos with load cells	4	4	4
Number of feed silos with FW 99	2	4	5
Feed mixing	–	✔	✔
Dosing container for additional feed component	–	✔	✔
Number of dimmers	4 (1+3)	8	8
Number of bird scales	2	4	12
Number of time switches	4	4	10
Number of water meters	1	8	24
Number of egg counters	1	8	128
Number of water lines with level monitoring	4	32	64

Silo weighing with UniScale


Calcium source dispenser

Automatic rinsing system

Water consumption

What can ViperTouch record and control?

- accurate consideration of the layers' daily rhythm regarding feed, water, light and behaviour;
- using UniScale, up to 4 silo scales with up to 8 weigh bars each can be connected for easy monitoring of the silo contents and for registration and logging of feed deliveries;
- feed consumption: total, per day and per bird;
- the feed weigher, e.g. FW 99 or a conical screw mixer, permits mixing up to 5 feed components;
- water consumption: total, per day and per bird with up to 24 water meters that can be named;
- control of the automatic rinsing system by means of special pressure regulators;
- monitoring of the water levels in the drinker lines;
- registration of up to 128 egg counters;
- connection of up to 12 bird scales to record bird weights;
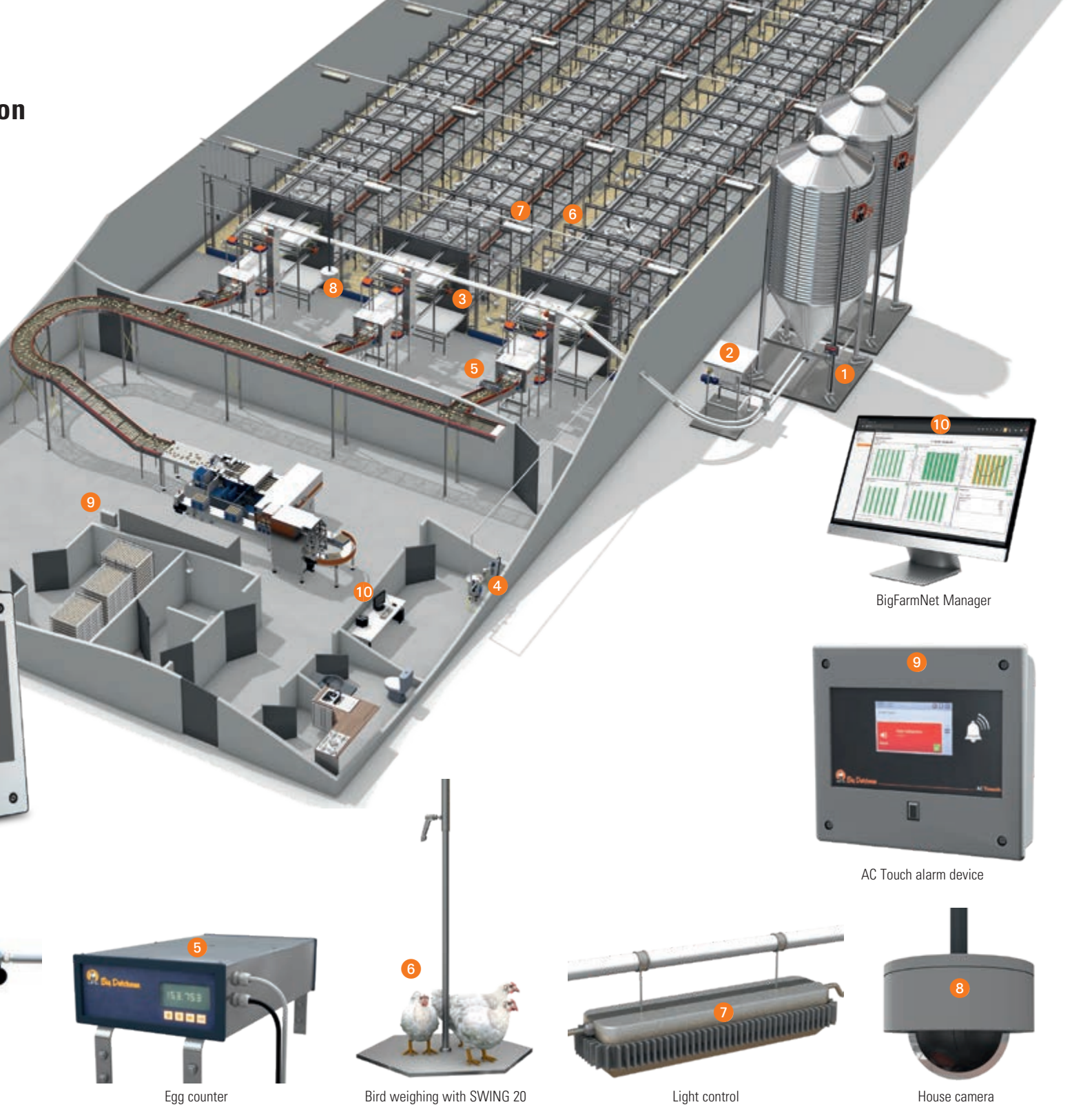
BigFarmNet Manager

AC Touch alarm device

Egg counter

Bird weighing with SWING 20

Light control

House camera

- light control via 8 different light groups with sequential simulation of the twilight phase for sunrise and sunset; the luminous 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;

- alarm messages for example 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.

BigFarmNet technology

UNITES ALL MANAGEMENT TASKS OF YOUR FARM IN ONE SOFTWARE

❯ Always up-to-date: keep track of everything

Use your ViperTouch controller, your office PC or a mobile device to make inputs – directly in the barn, while you are relaxing at home or even on different farms. All BigFarmNet components update and synchronise automatically, and in real time.

❯ Everything in one software – comfortable, fast and multilingual

Feeding, light, water, climate control and silo and alarm management. Every user can select from more than 30 languages.

❯ More security

Your entire production is recorded in one single software, which also means that the data of all houses are backed up automatically and all alarms are managed centrally. Inputs at the PC and in the app are approved and recorded at one central point.

❯ Optimised production results and reduced costs

Improve your production results by using efficient analysis 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

We are happy to support you personally on site, but can also access your computer for remote maintenance. This can save your time and money if need be.

How to work with BigFarmNet

In the office
with BigFarmNet Manager

In the barn
with ViperTouch

Anywhere you are
with the BigFarmNet app

Barn for free range egg production

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