

Climate and monitoring for pig houses

Efficient daily management for better results



FANCOM[®]
forward thinking

Facts & Figures

45+

Years of experience

1600+

1600+ poultry houses annually

210+

Global network of distributors and partners

4900+

Sections for pigs annually

700

Growing rooms for mushrooms annually

1

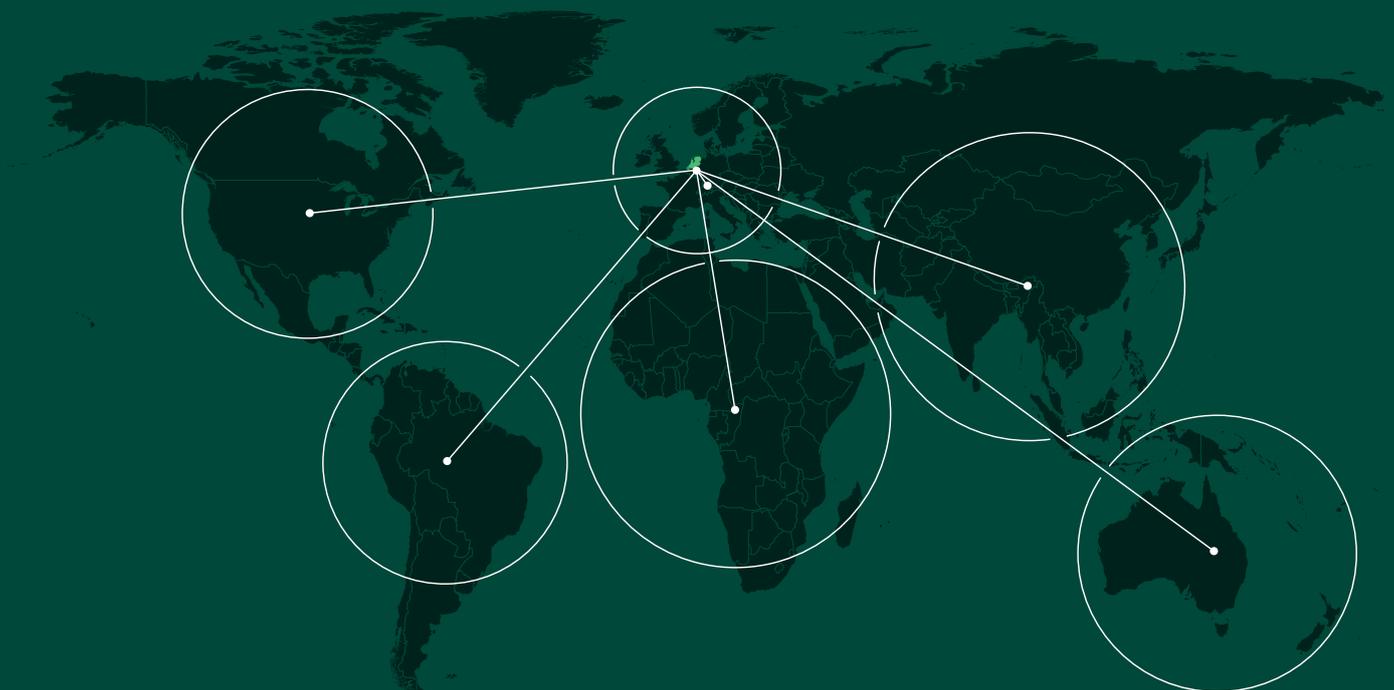
Number one in farm automation



Proven Dutch quality:

Fancom is active in 4 market segments in 63 countries.

All our products are designed and developed in the Netherlands.



The creative and development processes at Fancom are entirely focussed on achieving superior conditions for pig and poultry producers. Creating the right conditions starts in the house.

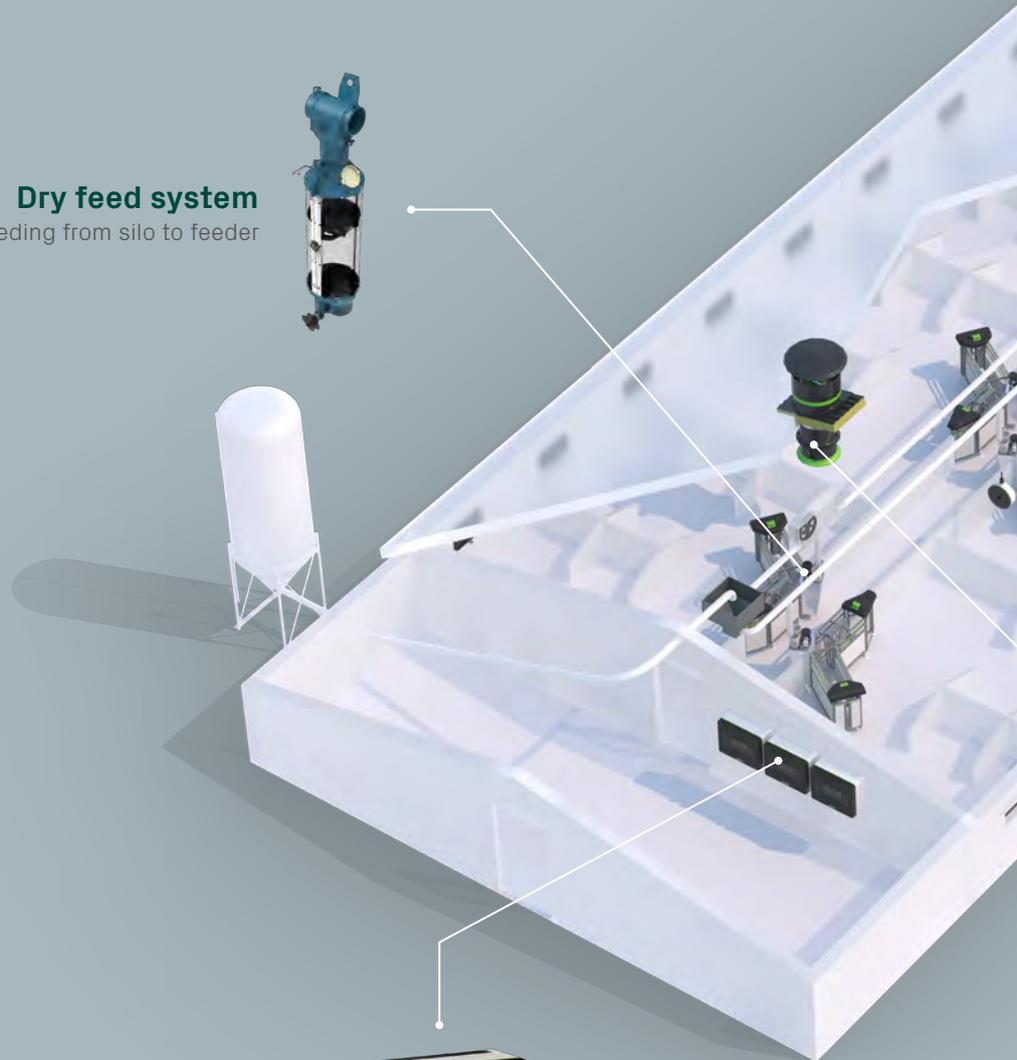
FANCOM®

Total house automation

Our feeding systems are part of the Fancom system for total house automation. We offer a suitable solution for every type of house, no matter where in the world. A solution where the controller and peripheral equipment use smart intercommunication and where the various processes such as climate control, feed and water distribution and animal weighing interact and operate seamlessly. And are always customised to match your needs. We call this new approach Fancom One; complete control of the entire house from one central point.

Here is an example of total house automation in gestating sows in group housing. View more examples on our website and discover what Fancom can mean for your house.

Dry feed system
Reliable feeding from silo to feeder



Lumina series
Big in simplicity





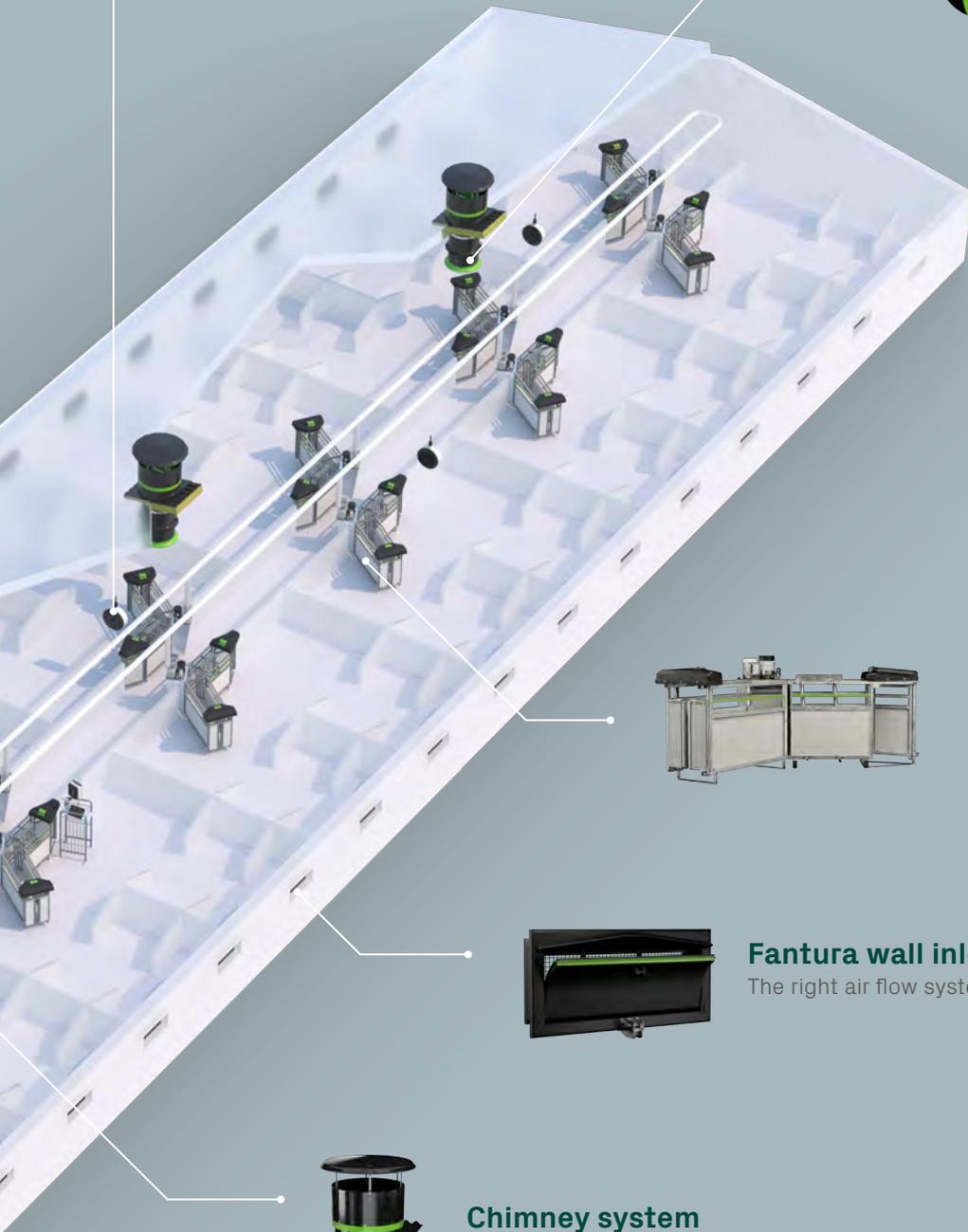
Climate sensors

Measure how comfortable your animals are



I-fan Xtra modular fan

Energy efficient ventilation



IntelliTek sow feeding station

Your gestating sows in top condition



Fantura wall inlet

The right air flow system for every roof



Chimney system

The right air flow system for every roof

The ease of automatic processes in the house

As an agricultural entrepreneur you want to have a firm grip on your business operations. But you are also facing a market characterised by more rapid change than ever before. Spiralling costs for feed and energy are placing increasing pressure on your profit margins. And today's market demands sustainable and responsible production methods.

An automatic system saves time and improves your results

Irrespective of the scale of your farm, you still want to be able to control the processes in your house on a daily basis: Are the animals healthy? How can I reduce medication use? How much feed and water is being consumed? Are the animals growing as expected or should I change my delivery schedules? Efficient automation of all the processes in the house provides the answers to these aspects. Automatic systems save time and provide you with valuable information about the growth and health of your animals. And allow you to create superior conditions in the house for optimal growth conditions for your animals.



Computers for climate control

Creating superior conditions in livestock houses starts by regulating an optimal climate in the house, regardless of the outdoor conditions. Your animals are your living capital and the environment they live in influences their development and welfare. The right climate is beneficial to the growth and health of your animals and saves you costs for feed, water and energy. Thanks to a good climate control system, extreme weather conditions and sharply fluctuating day and night temperatures will have no influence on the house climate. You, however, can exert an influence on a sustainable and profitable production process. You are in control, not the conditions.

Computers for monitoring

Abnormal animal behaviour, falling production or weight loss are just a few signs that can indicate a lot about the situation in your house. Fancom has developed a series of accurate and reliable monitoring systems that observe and inspect animal behaviour and the production process. Examples of our monitoring computers are our systems for water monitoring and weighing finishers. Systems that alert you to deviations and allow a rapid response to the needs of your animals. This will limit any production losses during a rearing cycle. These monitoring systems are an indispensable tool if you want to create superior conditions in the house.

Ready for the future

The various computers operate in perfect harmony and form a single entity. They closely interact and share important management data. As an integrated system they create a synergy that will always give you the benefit of optimal conditions for animal growth. The individual control computers can be integrated in a clearly arranged switch panel for extra ease of mounting and installation. You can gradually start working towards a future-proof farm and equipping yourself to answer the demands of the future!



Computers for climate control

Fancom's climate computers allow you to easily create the optimal growth conditions for your animals. They excel in quality, flexibility and functionality and form the hub of your farm that will never let you down. With two series of climate computers, we can offer a suitable solution for every type of house.





AURA 14

AURA climate computers

The AURA is a series of simple Fancom control computers, used at section level, with touch-screen operation. The AURA combines smart control capabilities with very simple operation and sets a new standard for house automation: complete, simple and universally applicable.



Lumina 21 Touch plus

LUMINA climate computers

The LUMINA control computers have been designed for more demanding users. Offering the same ease of use as the AURA, the LUMINA features more extended control functionality, also suitable for multiple sections. Complete control of all processes computers in your house with a single touch.

Lumina software is characterised by the use of clear icons and colours: green means everything is fine, orange means that some aspect needs your attention. Handy navigation buttons on the main screen give direct access to the most important data from the houses. It is now possible to zoom in from each page to retrieve more details.

For added ease of operation, a number of Lumina control computers are also available with an extra large, 12-inch operating screen. This larger screen makes it easier to readout information on the screens, easier to adapt settings and reduces the risk of errors.



Infinia Information management system

The control computers in the house generate valuable data that is an essential source of information on the growth processes of your animals. The Infinia management software for your PC collects and combines this information and presents it in clear graphs and tables. The result is a wealth of management data that allows you to steer towards improvements based on facts and figures.



Practical app operation

The Fancom control computers have a handy Infinia Remote App that allows remote control of the computers via a smartphone. This keeps you in touch with your houses 24 hours a day, no matter where you are. All the latest data from the houses is displayed on the smartphone and in the event of any abnormalities, immediate intervention is possible from anywhere in the world. The Remote App saves time, improves the conditions in the houses and of course the end results!

Accurate ventilation

Accurate ventilation in pig houses is vital. Poor air quality and temperature fluctuations cause problems in the house with disastrous effects on the health of your animals. Your aim is to create a uniform climate for all the animals in the house in all conditions. The optimal climate helps prevent respiratory disorders, ear and tail biting, a poor feed intake, slow growth, increased mortality rates and excessive soiling of the pens. All these aspects have a negative impact on your profitability.



Fancom regulates the entire climate process, from the incoming air right up to air scrubbers for the exhaust air.

Sustainable

Fancom regulates the entire climate process, from the incoming air right up to air scrubbers for the exhaust air. Our climate policy is aimed at sustainable profits. We save on ventilation and heating and cooling, without compromising quality. On the contrary. Extreme weather conditions and sharply fluctuating day and night temperatures have no influence on the house climate. The temperature, humidity and CO₂ or ammonia are continuously monitored and any deviations in the gas balance are automatically corrected by the ventilation system.

Unique accuracy

What makes our climate computers stand out from the rest is the accurate ventilation based on the actual number of animals present, animal weight and the actual airflow measurement. A unique feature is the Optisec control that automatically adjusts heating and ventilation to prevent unnecessary heat being extracted from the house. This will reduce your heating costs.

Suitable for each house

The computers are suitable to steer all possible climate systems, for group housing systems or for animals housed in separate sections. There are also special controls for systems with a central exhaust duct which make it easy to move the emission point in the house or use an air scrubber system for post-treatment of the ventilation air.

Performance of Fancom climate computers

	Aura 12	Aura 14	Lumina 17	Lumina 20	Lumina 20
Number of houses					
Number of houses/sections	1	1	1	24	24
Sensors					
Temperature	3	3	24	288	288
Inside RH sensor	-	-	1	24	24
Pressure sensor	-	-	1	24	24
Ammonia or CO2 sensor	-	-	1	22	22
Outside temperature sensor	1	1	1	1	1
Outside RH sensor	-	-	1	1	1
Wind speed and direction sensor	-	-	1	1	1
Air flow measurement (ATM)	1	1	1	24	24
Water meter	3	3	32	32	32
Controls					
Mechanical ventilation	1	1	3	72	72
Heating	1	1	4	96	96
Cooling	1	1	1	24	24
Humidification	-	-	1	24	24
Boiler control	-	-	1	1	1
Central duct	-	-	-	1	1
Time clocks					
Feed clock	-	-	1	24	24
Universal clock	-	-	4	24	24
History	-	-	1 week	1 week	1 week
Signalling functions					
External alarms	-	-	4	28	28
Fire detection (thermo diff)	-	-	1	25	25
Management					
Animal management	-	-	√	√	√
Temperature curve	-	1	1	5	5
Registration groups	-	-	4	48	48
Ventilation curve	-	1	1	5	5
Ease of operation					
Touch-screen operation	√	√	√	√	√
Large screen					
FarmManager enables link to PC	√	√	√	√	√
Remote control via app	√	√	√	√	√

Climate sensors

Animals perform better in a good climate. A good living environment is more than just the right ambient temperature and relative humidity. Excessive carbon dioxide and ammonia concentrations are harmful to humans and animals. Particularly in cold periods, many farmers resort to reducing ventilation levels in the house in order to keep the heat in the building. However, reducing the ventilation too drastically can quickly disturb the gas balance in the house.

Optimal performance

A good gas balance is particularly important for young animals as the organs and skeleton develop in the first two weeks of life, and the foundations are laid for a robust immune system. Too high CO₂ values, especially at the start of the production cycle, cause problems with oxygen uptake in the blood and organs. This has a negative impact on animal performance, increases the risk of mortality, and can cause additional mortality at a later stage.

Animal welfare

Too much ammonia in the air can also impact on human and animal health. Pigs have a very sensitive snout and relatively small lungs, and are extremely sensitive to poor air quality. A high ammonia concentration, combined with high levels of fine particles, moisture and draught can cause serious respiratory disorders. Lengthy coughing and difficulty in breathing also has consequences for animal welfare. That's why Fancom offers a range of reliable climate sensors that continuously monitor the temperature, relative humidity, CO₂ content and, possibly, ammonia in the house. If the values become too high, the minimum ventilation will be increased automatically. The climate controller automatically ensures the correct air quality with the lowest possible heating costs.



RV sensor



Temperature sensor



CO₂ sensor



Ammonia sensor



Water monitoring

The water consumption of is one of the simplest, but above all most accurate tools, that a pig producer can use to monitor the performance of the animals. A sudden deviation in water consumption usually signals that something is wrong. Sudden higher water consumption may indicate illness, heat stress, or a leak in the system. Monitoring consumption patterns on a daily basis gives insight into water consumption so that potential problems can be identified sooner and any eventual damage prevented.



Water monitoring in our climate controller

A simple water meter is used to register water consumption. Fancom climate controllers have a special water monitoring program. This enables up to eight separate water lines or groups, or the consumption in the entire house, to be registered. Differences between the water lines mutually, or between yesterday's and today's figures are immediately visible. This allows timely intervention in the event of problems, often even before a problem has had the chance to have any negative effects on animal growth and health. The computer also generates alerts if the minimum and maximum flow rate for each line or in each house is exceeded so that any leaks in the system can be identified quickly.

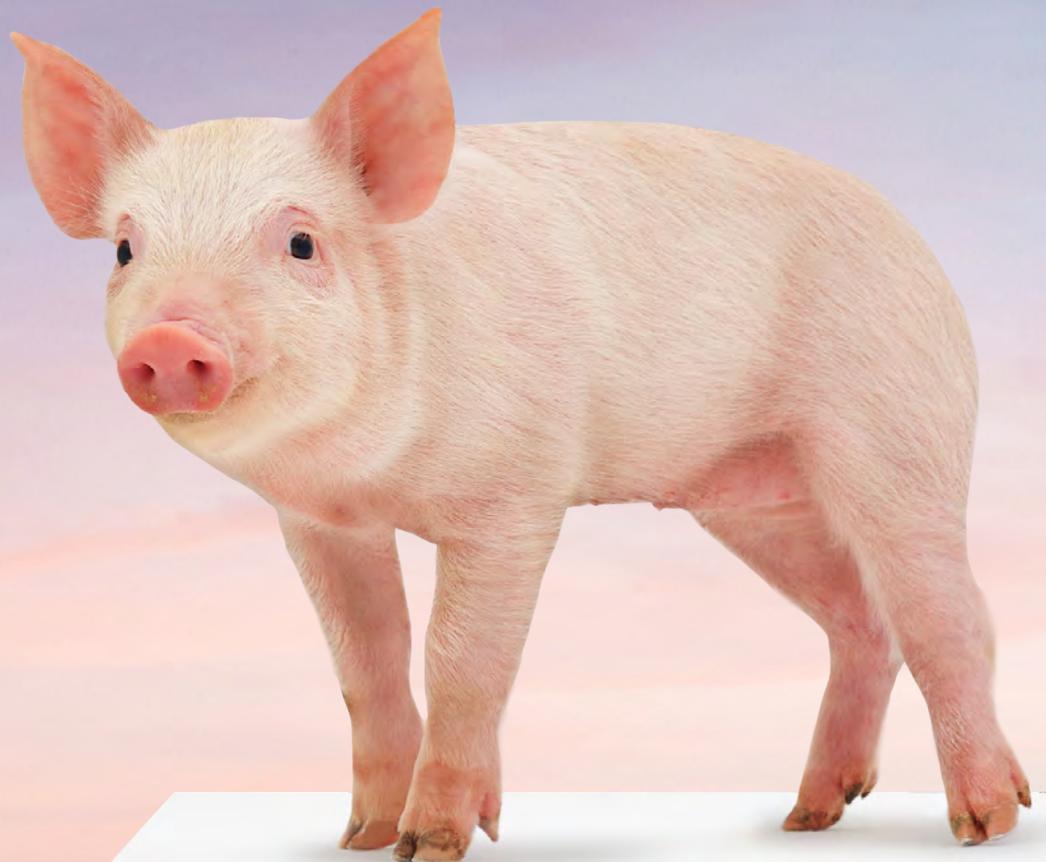
Monitoring consumption patterns on a daily basis gives insight into water consumption so that potential problems can be identified sooner.

Monitoring consumption patterns on a daily basis gives insight into water consumption so that potential problems can be identified sooner.



Alarms

It is vital that any malfunctions on your farm are reported reliably and in time. No matter how well-equipped your houses are, unpredictable situations that cause malfunctions can always occur. This is not necessarily an issue, as long as timely intervention is possible. If you are not alerted to problems, what started as a simple issue could potentially have a disastrous impact on the running of your farm. To prevent the risk of malfunctions not being signalled, Fancom offers you a range of alarm monitoring systems.





Octalarm-Touch

The Octalarm-Touch is an alarm dialler that monitors critical technical processes. As soon as a process malfunction is detected, Octalarm-Touch activates the alarm calls. This enables corrective action to be taken in time, preventing damage and production losses. The Octalarm-Touch is available with eight inputs as standard. The external extension module allows the alarm device to be expanded to 16 and even 24 inputs.

GSM networks

The Octalarm-Touch can use conventional landlines, GSM networks and communication via the Internet infrastructure, and offers extra security safeguards. A handy functionality allows contacts to be added and configured to determine who receives a call and when.

FB.8 alarm unit

The FB.8 is a monitoring device with a built-in 12V battery and battery charger, featuring 3-phase monitoring as standard. The FB.8 has eight alarm inputs, test button/selector switch and a reset button. The alarm input can be connected as an “open” or “close” contact. Several alarm devices can be connected.



eYeGrow weighing system for finishers

Do you ever wonder if your finishers are growing enough? And can you predict the end weight early on? Or would you rather be surprised at the end? Opt for the continual safeguard provided by the eYeGrow weight monitor and get the best performance from your animals with maximum growth gains.



How does the eYeGrow weighing system for finishers work?

The eYeGrow is an automatic weight monitor for finishers. A 3D camera installed in the ridge of the section continually monitors and registers the animals so the computer can accurately calculate their weight. This process is entirely automatic and stress-free for the animals. Manual weighing causes stress, which will be reflected by a growth dip. eYeGrow prevents this growth dip and requires no additional labour input.

Save on feed costs

eYeGrow allows the development of a group of finishers to be followed from day to day. The measurement data is stored in the cloud and important management information such as average weight, growth per day, number of measurements and uniformity is available 24/7 no matter where you are. You can easily adapt your farm management towards an optimal feed strategy and save feed costs.

Improved delivery strategy

The measurement data is stored in the cloud and important management information such as average weight, growth per day, number of measurements and uniformity is available 24/7 no matter where you are. Continual insight into weight and feed intake gives you a more detailed view of your feed strategy and helps improve performance and results. You can also predict the delivery weight of the group far more accurately and achieve a higher price for the supplied finishers.

A weighing system for every house

As the camera hangs above the section, eYeGrow does not take up any space in the pen so there is no effect on the number of animals that can be housed. eYeGrow is ideal for retrofitting in existing houses. Installation of the low-maintenance system is very simple. eYeGrow is suitable for finishers that weigh above 40 kg.



Superior conditions in the house

The creative and development processes at Fancom are entirely focussed on achieving superior conditions for pig and poultry producers. And for mushroom growers.

Creating the right conditions starts in the house. That is why we firmly believe in the value of total house automation. With smart house technology that manages and controls all the processes in the house from a central location. Ventilation and heating, feed and water distribution, lighting, animal weighing and egg counting - all controlled and monitored perfectly.

You can create insight by collecting and linking as much data as possible from these automated processes. Insight into animal health and behaviour, insight into feed and consumption, insight into growth and development. Valuable information that enables more efficient and profitable production in a way that respects animals and the environment.

In our opinion, there are no limits to what complete farm automation can do. Whatever our customers need to know - we can automate and measure it. And the more informed they are, the better control of animal welfare and results. Creating the right conditions for healthy and future-proof farming. Our ambition together with our customers is to ensure that whatever happens inside the house has an impact outside.

We call the driver behind creating an impact Forward Thinking - the way of thinking, acting and working that typifies Fancom. We set the bar high for ourselves and the people around us based on the belief that things can always get better. And must. Our automated processes facilitate control inside the house. Outside the house, making a meaningful impact requires a thorough understanding of the challenges facing our customers. They operate in a sector that has to balance the interests and tensions of nature, technology, data, politics and social sentiment. Against the background of this dynamic, we challenge ourselves to develop ever-smarter systems. We are at the forefront of development and innovation. Yesterday, we provided the solutions to today's challenges. Today, we are working on the solutions to tomorrow's challenges. Always anticipating developments. This is precisely what we mean by Forward Thinking.

By combining the power of innovation, leadership, empathy and partnership, Fancom guarantees solutions that benefit operational management, people, animals and the environment. Today and tomorrow.



By combining the power of innovation, leadership, empathy and partnership, Fancom guarantees solutions that benefit operational management, people, animals and the environment.
Today and tomorrow.

Fancom house systems all over the whole

Countless pig farmers all over the world benefit from optimal conditions in their houses by using one of our systems.



UK
Lumina 38



Portugal
Lumina Switch box



Italy
Lumina



Korea
Lumina Touch Plus



Forward thinking

Fancom BV

Wilhelminastraat 17
5981 XW Panningen

P.O. Box 7131
5980 AC Panningen
The Netherlands

+31 (0)77 - 306 96 00
fancom@fancom.com
www.fancom.com