



# **ViperTouch**

The flexible climate and production computer for your poultry house

# ViperTouch Good. Better. Best. – We never let it rest.



### A new experience in terms of comfort, speed and performance

**ViperTouch** has a large, graphical colour display on which all functions are clearly displayed. The symbols used in the main menus are easy to interpret and facilitate navigation.

In the standard version, the computer is delivered in English and German. There are however more than 16 different languages available, such as Chinese, Danish, Romanian, Russian, Spanish, Thai ...

Data and settings can be saved on a USB stick (backup copy) by means of which it is also possible to install new programs.

If the standard version is not sufficient, the computer can be upgraded with an extension box. The extension box allows incorporation of 10 to 40 additional relay modules with or without manual control as is often requested, for example, for the American market.

There are also relay modules available that can be used for direct connection of single-phase fans or motors with up to 30 amp.

### Display examples – main menu

ViperTouch allows the user to select and arrange all important data for climate and production control in the main menu. This way every customer quickly gets a customized overview of the situation in his barn. A password protection function ensures safety on up to three different levels. This means settings can only be changed by authorized persons.







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Example 1: standard main menu



Example 2: extended main menu

Language selection

# ViperTouch and BigFarmNet-Manager

BigFarmNet-Manager is a PC program which allows the customer to list and visualize as well as process and control the barn climate and production data from his office PC. Production results can be analyzed comfortably. It is also possible to make and automatically transfer settings regarding feed, water and light to other houses in the same production mode.

The new broiler module provides for an exact documentation of the course of the grow-out. Several grow-outs can be compared with each other or reference values concerning feed and water consumption or daily weight gains or losses.

These are the best prerequisites for the producer to be able to take advantage of the full performance potential of a flock while saving costs, and achieve consistantly good results at a high degree of efficiency.





Current climate data

### The advantages at a glance

- the software uses simple, easy-tounderstand symbols;
- quick data overview, both as graphs and as lists;
- detailed alarm log, history and analysis;
- fast connection to the office PC via LAN Ethernet in combination with fibre optic cables;
- communication with existing computers via BFN-WebLink;
- use of standard IT components;
- remote access via network access.







Current production data feed conversion broilers



Overview production

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**Office PC** 

Farm with BD climate/ production computers

Farm with ViperTouch via WLAN

Farm with ViperTouch via cable (max. length 100 m)

Overview alarms

# **Use of ViperTouch as climate computer**

The new ViperTouch is a state-of-the-art climate computer that allows you to control the entire barn environment as efficiently and as easy as possible.

#### This means:

ViperTouch can be used for all established types of ventilation (natural, mechanical and combined). This also includes side-, cross-, tunnel- or CombiTunnel ventilation.

#### Example of side ventilation

- ✓ wall inlets CL Flex for fresh air;
- chimneys CL 600 for exhaust air;
- ✓ gas heater JetMaster as heating system
- cooling system Fogging Cooler.



#### Example of tunnel ventilation

- tunnel for fresh air;
- ✓ AirMaster for exhaust air
- cooling system Pad Cooling.



### Unrivaled comfort: freely-selectable climate control levels

ViperTouch makes it possible to control the house climate on 3 different control levels, which can be freely selected by the user:

- Basic Mode (simple control)
- Flex Mode (flexible control)

Profi Mode (advanced control)
Simple control mechanisms can be

controlled in Basic Mode. In Flex Mode fresh and exhaust air can be regulated individually. It is for example possible to switch off the fans temporarily in order to ventilate naturally through the chimneys when, in case of free-range production, the pop-holes are open.

Profi Mode allows you to use PID control

(precise and sophisticated temperature control), or to display the windchill factor in case of tunnel ventilation or the exhaust air volume in m<sup>3</sup>/h/bird ("real-air principle").



### Climate control with ViperTouch: an abundance of possibilities!

- connection of up to 8 sensors for room temperature and 2 sensors for humidity;
- control of up to 2 room heating systems with 2 zones each (JetMaster, RGA heating device, hot-water heating, infrared heaters);
- if the house is to be heated only partly, up to 3 brooding zones can be created; this means only a certain part of the barn is heated and the rest is kept at anti-freeze temperature;
- control of up to 4 zone heaters (gas radiators or extra heating;
- control of up to 14 MultiStep<sup>®</sup> groups (in side or tunnel mode);
- standard step-control of fans (16 steps in side and 16 steps in tunnel mode);
- minimum ventilation in pulse-pause mode;
- controlled tunnel ventilation, this means the tunnel openings are opened or closed based on the required air speed;

- night function, this means the temperature is lowered (or raised) for a defined duration after which the ViperTouch switches back to normal control;
- control of cooling and humidification (PadCooling, FoggingCooler);
- display of the cooling temperature by means of up to 2 optional pad temperature sensors;
- temperature-controlled emergency opening with MC 378 T or MC 378 CT;
- connection of a CO<sub>2</sub> sensor for active minimum ventilation control based on the CO<sub>2</sub> content in the house air;
- connection of additional free sensors, for example for NH<sub>3</sub>, air speed or outside humidity;
- active negative pressure regulation, that means negative pressure sensors measure the outside air pressure and the negative pressure in the barn and the computer controls the fresh air based on these data or activates an alarm;

- optimized comfort temperature control, including air humidity;
- display of trend curves over the entire grow-out on the large colour-display.



# **Use of ViperTouch as production computer**

**ViperTouch** is not only a professional climate computer, but also a full production and management computer: it records all important data concerning production, growth, feed and water consumption and mortality. This permits you to react quickly to any changes and to take the required action which in turn will lead to better performance results and will increase the economic efficiency of your production.

The extension module "full broiler

functionality" provides additional functions which are especially important for broiler and broiler breeder management.

### Extension module "full broiler functionality"

With the module "full broiler functionality" ViperTouch provides extended functions for broiler and broiler breeder feeding:

- by means of the electronic continuousflow scale FW 99-B, the feed consumption can be recorded and up to 4 types of feed can be mixed;
- up to 2 electronic silo scales can be controlled by means of the scale module;
- it is possible to use different feeding programs – ad libitum, time-controlled weight-on-day function – to help achieve the target weight on the anticipated slaughter day;
- controls up to 9 target devices (feed hoppers) per house.





### Production control with ViperTouch: an abundance of possibilities!

- recording of feed consumption: total, daily and per bird with a silo-, drum- or pulse scale; the scale module permits the connection of up to 2 silo scales with 8 load cells each for easy monitoring of the silo content; feed deliveries are recorded and logged;
- control of target feeding: up to 9 hoppers per house can be filled with a defined amount of feed; for example for broiler breeder feeding with separate rooster feeding;
- the feed scale FW 99-B permits mixing of feed components from up to 4 different silos (additional wheat feeding);
- recording of the water consumption: total, daily and per bird by means of up to 6 water meters;
- connection of up to 4 bird scales (INCAS or SWING) for the recording of bird weights;

- light control via 4 different sunlight simulators with sunrise/sunset simulation; the luminous intensity can also be changed;
- it is possible to connect up to 4 freelyprogrammable timers for individual tasks, such as Egg-Saver, zone light, nest expel function, folding grilles beneath the aviary;
- pause function, helps the producer to optimize the phase between two growouts regarding soaking, cleaning, drying and heating of the barn;
- campatible with BigFarmNet Manager, the PC program for graphical and tabular processing and visualization of production and climate data in realtime, including remote access function;
- alarm messages, for example in case of power failure, deviations of set values such as temperature, humidity,

water and feed consumption, as well as minimum silo content.





### ViperTouch is available in 5 different configuration levels – based on the requirements

ViperTouch	710	1520	2330	1500/2300	X30/X 40
A) Maximum number of analogue inputs/outputs	7	15	23	15/23	
- outside temperature sensors	1	1	1	1	
- house temperature sensors, max.	8	8	8	8	
- humidity sensors, max.	2	2	2	2	
- pad sensors	2	2	2	2	
- negative pressure sensors	1	1	1	1	
- free sensors (NH <sub>3</sub> , CO <sub>2</sub> , O <sub>2</sub> , air speed), max.	4	4	4	4	
- CO2 sensors for control of minimum ventilation*	1	1	1	1	
- external signal 0-10 V for speed control***	2	2	2	2	
- signal for CL 74 (servomotor at chimney 0-10 V)***	2	2	2	2	
- CL 74 V with feedback potentiometer for stepless exhaust air***	2	2	2	2	
- fresh air servomotor feedback potentiometer	6	6	6	6	
- servomotor tunnel feedback potentiometer	2	2	2	2	
- water metre	6	6	6	6	
- sensor cross auger	1	1	1	1	
- counter input for pulse scale	1	1	1	1	
- bird scales (full broiler functionality)	2 (4)	2 (4)	2 (4)	2 (4)	
- dimmer light, analogue output	4	4	4	4	
- passive light sensor (no control)	1	1	1	1	
- heating, analogue output	2	2	2	2	
- gas radiator	4	4	4	4	
- manual tunnel open	1	1	1	1	
B) Maximum number of digital outputs	12	22	32		30/40
- contacts for heating system	4 (6**)	4 (6**)	4 (6**)		4 (6**)
- contacts for gas radiators	4	4	4		4
- contacts for pad cooling	2	2	2		2
- contacts for spray cooling	2	2	2		2
- contacts for soaking	1	1	1		1
- contacts for wetting	1	1	1		1
- CL 74 exhaust air chimney stepless (2 relays per servomotor)	2	2	2		2
- CL 74/75 fresh air chimney Fumus/FAC (2 relays per motor)	1	1	1		1
- side mode groups for exhaust air in MultiStep	14 (8****)	14 (8****)	14 (8****)		14 (8****)
- tunnel mode groups for exhaust air in MultiStep	14	14	14		14
- side mode groups for exhaust air on/off**	16	16	16		16
- tunnel mode groups for exhaust air tunnel stages**	16	16	16		16
- side inlets (2 relays per 1 servomotor)	6	6	6		6
- tunnel inlets (2 relays per 1 servomotor)	2	2	2		2
- emergency opening	1	1	1		1
- fans for recirculating air (thermostat)	4	4	4		4
- silo 1 and 2	yes	yes	yes		yes
- silo 3 and 4 (full broiler functionality)	ja	ja	ja		ja
- cross auger	1	1	1		1
- Light on/off	4	4	4		4
- timers	4	4	4		4
- feeding	1	1	1		1
- water valve	1	1	1		1
- scale	1	1	1		1
- soaking	1	1	1		1
- targets for broiler breeder (full broiler functionality)	2 (9)	2 (9)	2 (9)		2 (9)
- alarm	1	1	1		1

It is not possible to use more analogue inputs or digital outputs than the number listed in row A and B.

The Viper scale module can be connected to all extension stages of ViperTouch.

Depending on the type of ViperTouch stepless fans can be controlled by means of an internal or external triac.

\* only in Profi mode \*\* only in Basic or Flex mode \*\*\* only in Profi or Flex mode \*\*\*\* two-zone control in Profi mode



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