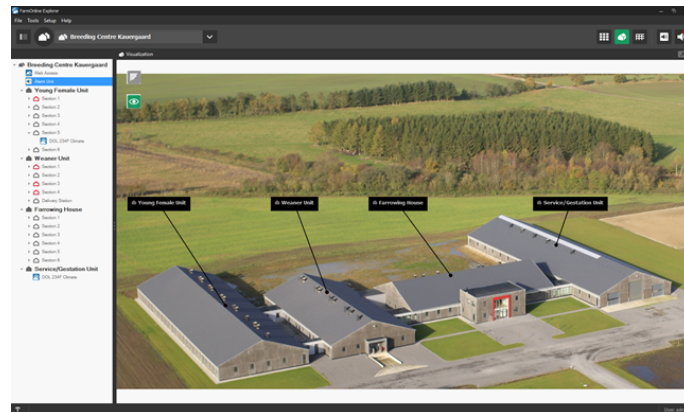


# FarmOnline Explorer

## Pigs

### Technical Info



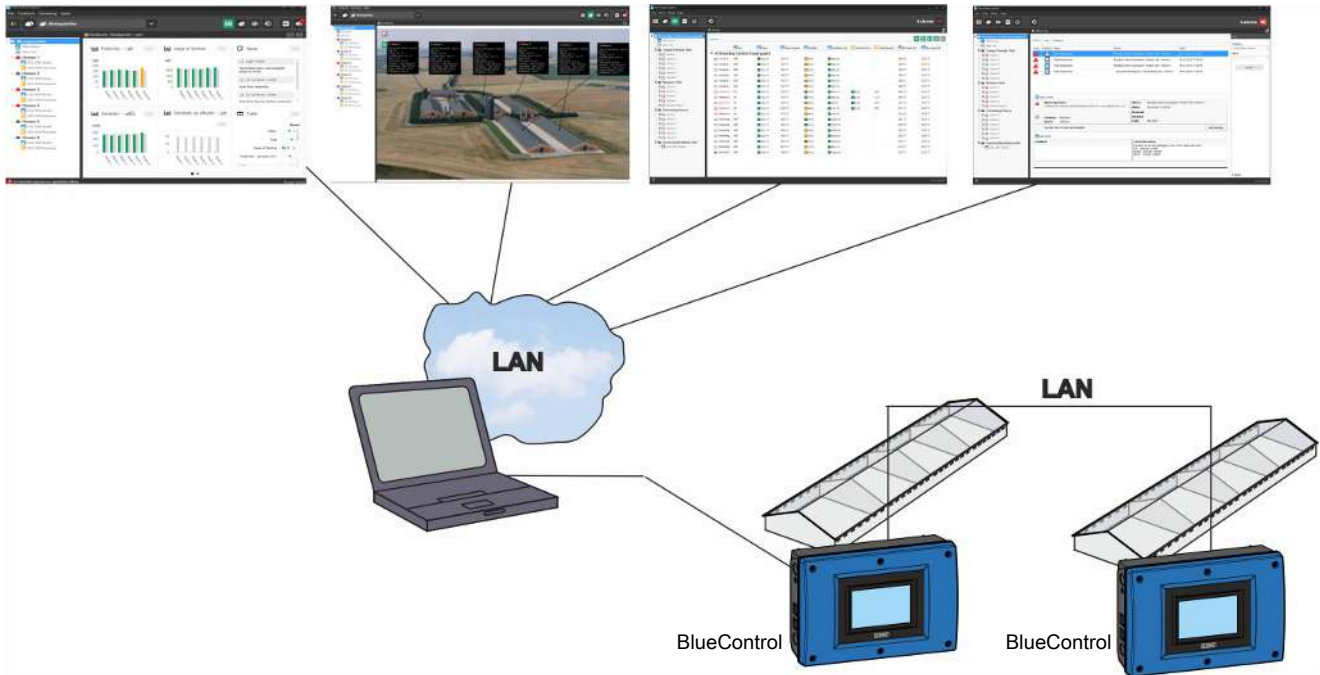
## 1 Product description

FarmOnline Explorer is a Windows-based PC program that contains an online management system. The user can, from any PC, access the SKOV climate controllers connected to a LAN or RS485 network.

The user can, via the Internet, get a comprehensive overview of production and climate data (depending on the controller functions) from several farms or import data into its database.

FarmOnline has numerous management functions supporting daily management, analysis, and documentation. The basis for this is direct data access (real-time), a user-friendly overview, and the ability to operate the controllers remotely.

FarmOnline is a registered trademark of SKOV A/S.



## 1.1 Tools

### User friendliness

- Customised overview.
- Graphical user interface.
- Color indicating the status.
- Access to webcam images.
- Read access to data via webpage.

### Alarm

- Access to alarm units.
- Real-time data and alarms.
- Logging alarms.
- Alarm notification in form of a text message or an email.
- FarmWatch monitoring of water consumption in pig houses.

### Safety

- Password login.
- User administration.
- Remote access for service technicians.
- Backup of controllers.

### System

- Access to production and climate controllers.
- Access to air cleaning controller
- Remote control of controllers:
  - changing of set values
  - acknowledgment of alarms
  - handling of batch data and in-between functions
  - setting up day program for climate and production, e.g. feed
  - copying day programs from one controller to another
- Several networked PCs with FarmOnline Explorer.
- Display of weighing data.

### Data

- Historical data analysis via curves.
- Comparisons in terms of history between individual batches and between different locations.
- Exporting data to other database management systems.
- Exporting data to other programs e.g. Excel.
- Creating production and climate data reports.

## 1.2 FarmOnline basic- and additional modules

### Basic modules



#### **FarmOnline Climate Pigs**

For monitoring of the climate and handling alarms in pig production.

### Additional modules



#### **FarmOnline Production Pigs**

Production monitoring of pigs.



#### **FarmOnline Alarm unit**

For monitoring the alarm unit DOL 2400/2300.



#### **FarmOnline Alarm notification**

Alarm notification via SMS or email.



#### **FarmOnline FarmWatch**

Monitoring of water consumption in pig houses.



#### **FarmOnline Web Access**

Opens FarmOnline Explorer for external access via the FarmOnline WebExplorer.



#### **FarmOnline Luftrensning**

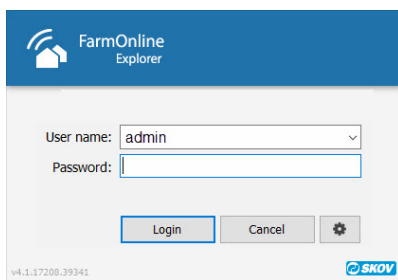
For the registration of data from the air cleaning controller and designing of reports.



#### **Remote Access**

Access to operation and display of the controller screen.

## 1.3 Basic modules



### Security

Access to FarmOnline requires password login.

Users are created with a user account with their own password and the rights of the assigned user group.

The following user groups are available:

- Guest
- Normal
- Administrator

Each user group has different program rights in terms of saving changes, administering users and setting up the program.



### Dashboard

The dashboard provides an opportunity to make a user-adapted display of selected key values at both house and farm level

The dashboard is set up as a combination of graphics and tables. It is also possible to select a notes field, where the user can write and save notes.

Each user can have their own dashboard.



### Visualization

FarmOnline is able to import the user's own photos and drawings of the farm and sections, ensuring high graphic recognizability in the program.

So-called hotspots can be added to the outline view to show the key values for inside temperatures, alarm status, etc.

Adding graphical features for all levels (farm, house, section) will facilitate navigation in the program, ensuring the User word quick overview of conditions and accurate localization of deviations.

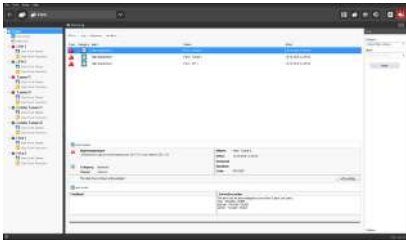


### Overview

The survey function enables a reading of key values and alarm and house status for the entire farm and for individual sections. The user chooses which values to be included in the overview function.

Colored key values indicate the current status and thus provide a quick overview of problems, if any.

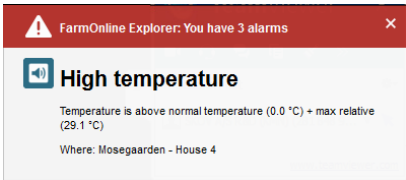
Tables can be exported to other formats and such as pdf or xls for documentation or analysis.



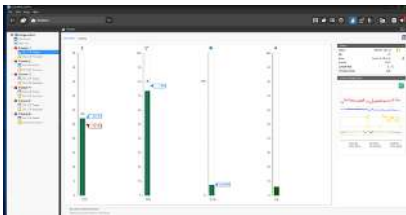
### Alarms

Alarms are displayed through a pop-up function, no matter which program is active on the PC.

FarmOnline displays alarms as red markings. Click the marking to open an alarm window with alarm details. Users with the right to do so can acknowledge the alarm (on the controllers DOL 532 Tunnel, BlueControl Poultry, and BlueControl Pigs). You can also add notes on alarm causes, troubleshooting, and more to each alarm.



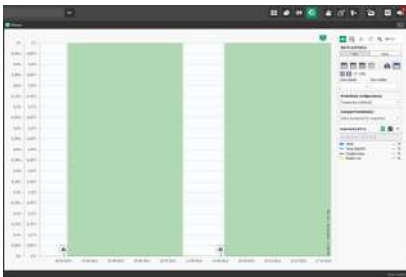
The Log and History functions contain various search criteria that allow you to analyze the occurrence of historical alarms, thereby supporting the users' experiences.



### Climate

Once the user has sized up the situation using the various overview screens, the climate screen makes it possible to go deeper into the climatic control function.

The program displays selected key values for temperature, humidity, ventilation, heating and CO<sub>2</sub> by means of user-friendly graphic elements where settings can be changed directly.



### History

The efficient climate history function of FarmOnline allows data storage for up to five years.

Several search criteria enable requested data to be extracted and indicated in the form of graphs.

Comparisons in terms of history can be carried out between individual batches and between different locations.



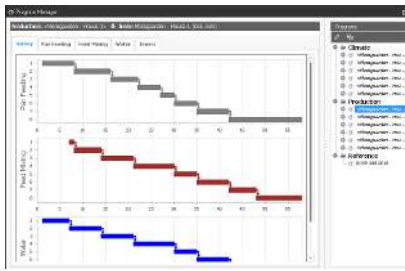
### Batch management

Batch Manager makes it possible to set batch data, such as the number of stocked animals and references, and to set and activate in-between functions such as washing and drying.

Concerning poultry, it can also generate reports with production and climate data for the batch on a daily, weekly, and batch basis.

As for the controllers DOL 532 Tunnel, BlueControl Poultry, and BlueControl Pigs, it is possible to change the house status from Empty house to Active house.

An overall timeline illustrating the chronology of the events relating to the batch and previous batches.



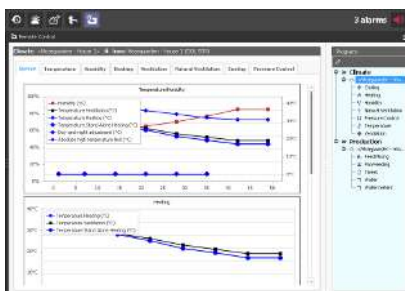
### Program Manager

The Program Manager can create and edit standard day programs for climate, production and references for different types of house controllers.

The graphic display makes it easy to edit day programs, which can be changed and installed on all the required house controllers at once.

An icon in the program survey indicates whether or not settings have been changed locally for the house controller.

The Program Manager makes it easy to ensure that the same settings are used on the entire farm/ several farms and that the required climate and production strategies are followed.



### Remote control

It is possible to adjust the daily programmes of the individual house controllers, for example for temperature, lighting and feed, via the Remote control function in FarmOnline Explorer.

Location	Name	Link
House 1	Camera 1a	<a href="http://www.dan.com">http://www.dan.com</a>



### Camera

Webcams installed on farms can be selected as key values.

The key value is shown as a link in the visualization and overview. It provides access to images from all the connected cameras.

## 1.4 Additional modules

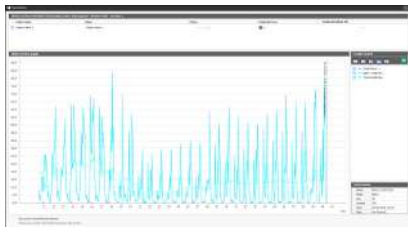


### FarmOnline Web Access

FarmOnline Web Access opens FarmOnline Explorer for external access via the FarmOnline Web Explorer.

With Web Access, you can access the FarmOnline Explorer data over the network (Internet or local network) so that it can be viewed, for instance, in the FarmOnline Explorer app, even though you are not on the local network.

Web Access allows the system to automatically connect FarmOnline Explorer to a local network and the system app.



### FarmWatch

FarmWatch allows continuous monitoring of water consumption in finisher sections as well as generation of alarms when water consumption deviates from the expected level.

This way, irregularities in the production, if any, can be detected and corrected earlier than would otherwise be the case.

The following data will also be available to the user for overview and analysis:

- Water consumption on an hourly basis
- Water consumption per animal



### Pig production

Provides an overview of productivity in the form of feed/water consumption and growth.

Displaying both current and historical data, enables you to both follow the development of the individual batches and to make comparisons across batches.

Easily comprehensible graphic elements with the most important key figures of the location show the status indicated by colors:

- weight and gain
- dead birds and mortality
- water consumption and feed per bird and water/feed ratio
- FCR



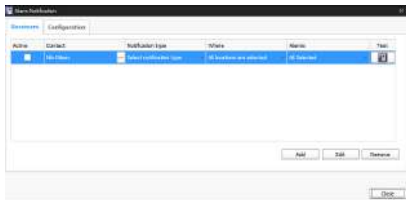
### Air cleaning

In houses with air-cleaning installations FarmOnline Explorer can show operating data from the air-cleaning controller.

It is also possible to select key values for reports to, for example, authorities, that show data both in table form and as graphs.

- The reporting module comprises i.e. process and runtime parameters, including parameters mentioned in *Farm AirClean BIO Flex Technical User's Guide*
- The user selects which of the available parameters should be included in the reports.
- Data can be presented as hourly or for 24 hours
- Graphical presentation of 24-hour data (not of hour data)
- In the report the current value at the end of the period is presented, or at the time stated
- Export- and printing options according to FOL standard (pdf, html, mht, rtf, xls/xlsx, csv, tst, various image formats)

Note: The power consumption is documented by means of the FarmOnline basic module.

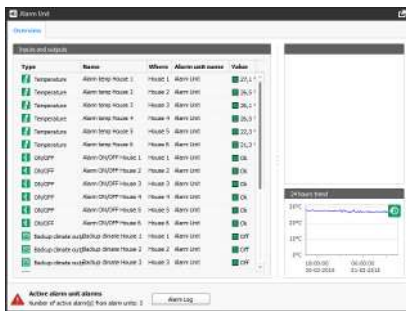


### Alarm Notification

FarmOnline Explorer can generate an alarm message in the form of an SMS or email.

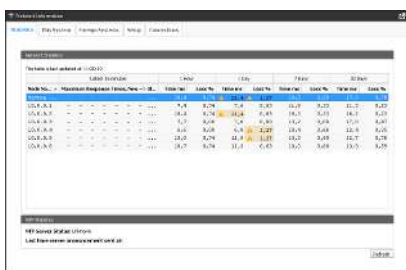
The user can decide whether selected alarms from specific locations are to be sent as an SMS or email to selected recipients.

SMS requires a SKOV GSM USB modem.



### Alarm unit

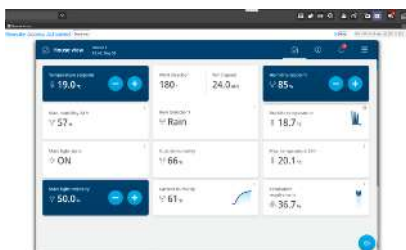
The overview shows the system's alarm units. The relevant inputs and outputs can be seen either together or for the house to which they belong.



### Network Information

This menu displays activity statistics for the entire network that FarmOnline Explorer is a part of. This is a good tool for ensuring that the network is functioning optimally.

It also provides access for carrying out network configuration for newer versions of house controllers on the network.



### Remote Access

By logging in to Remote Access, options for service and display of the selected climate and production controller's screen are made available.

## 1.5 Network

FarmOnline collects data from the climate and production controllers directly via LAN or an RS485 data network via FarmOnline WebLink (FOWL).

You can connect up to 20 controllers to a FarmOnline WebLink. Each network can hold an unlimited number of FarmOnline WebLink units.

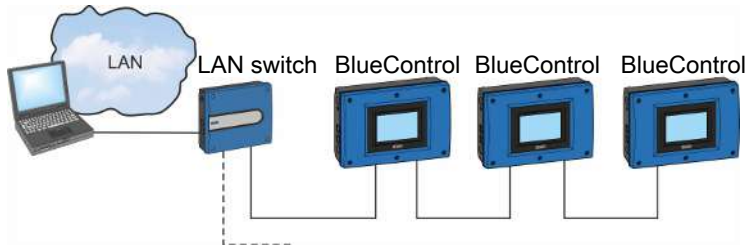


Figure 1: Example of controllers in a LAN network

The following controllers can only be used on the network specified:

Type network	Unit
LAN	BlueControl, DOL 532 Tunnel, DOL 2400, DOL 2300
RS485	DOL 356

## 1.6 FarmOnline WebExplorer

The webpage FarmOnline WebExplorer grants read access to several farm, e.g. via Internet Explorer.

With FarmOnline WebExplorer, you can create an overview of many farms in one screen display. The below example links together three farms in one web page.

For devices that log onto the system via the FarmOnline Explorer app, access can be set up as either read-only or read/write access. The user has the same user rights in the app as those that have been set up in FarmOnline Explorer.

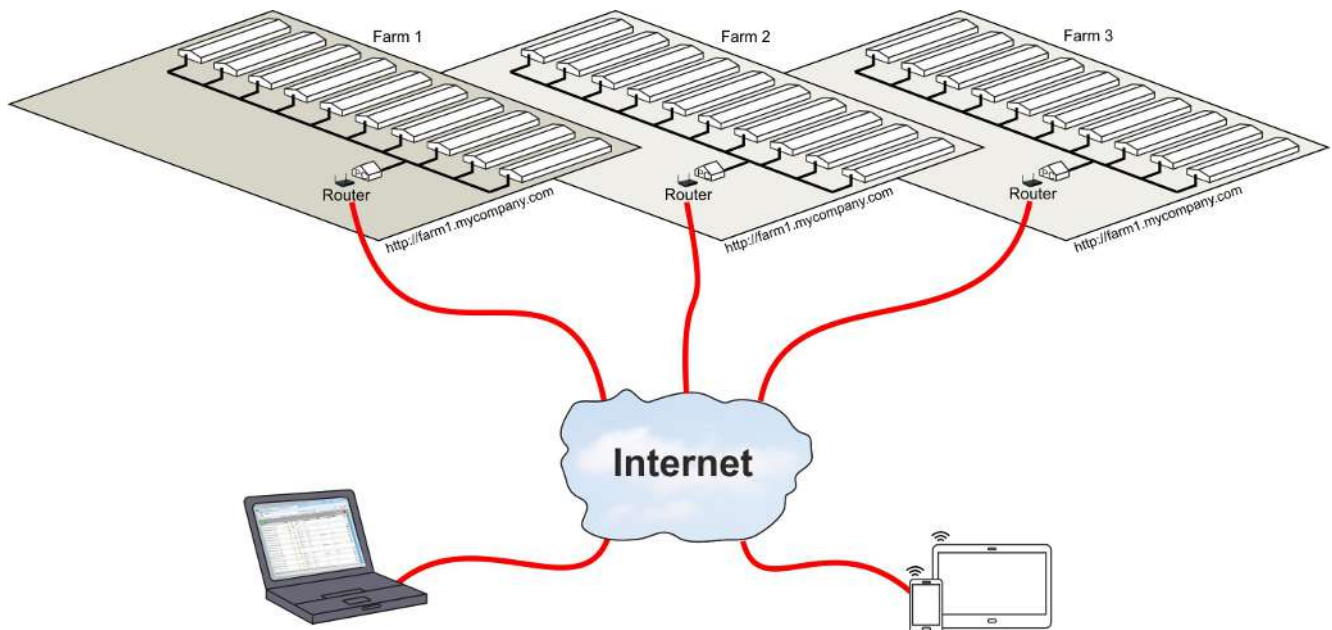


Figure 2: Example of access to FarmOnline WebExplorer via the Internet.

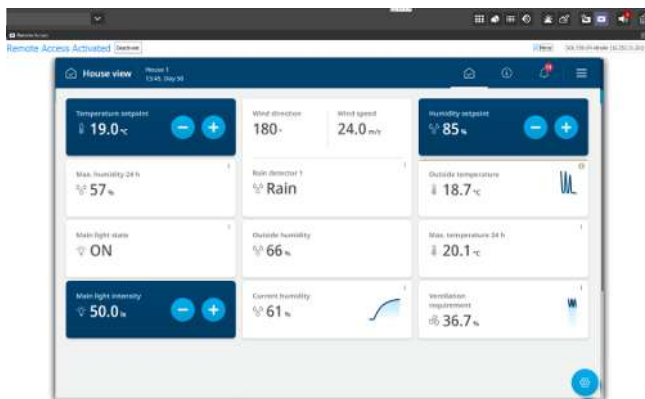
## 1.7 Remote Access

With the function Remote Access FarmOnline Explorer gains direct access to the controller via a display that is a 1:1 replica of the controller display.

On a local network, FarmOnline Explorer thus provides the user with direct access to all functions and data in the controller. On networks with an Internet connection, this access is achieved for example through TeamViewer (a program for remote service and presentation). The function will therefore make service access easier to house controllers in connection with troubleshooting and other support.



Figure 3: Remote Access in principle.



FarmOnline Explorer shows the house controller display, which can be operated as if one was standing right next to it.

Service Access can be run unlicensed for a 90-day test period.

## 2 Product survey

### Licenses

**Note: FarmOnline Explorer can run without licenses for 60 days after installation of the program. After the 60 days, the program cannot be used without licenses.**

The FarmOnline product is composed of a number of licenses for the different modules. The licenses are supplied on a USB stick.

**Select how the licenses are to be supplied.**



With start package

**130360 FarmOnline Start Package Pigs DA**

**130361 FarmOnline Start Package Pigs EN**

**130362 FarmOnline Start Package Pigs DE**

**130370 FarmOnline Start Package Pigs RU**

The USB stick with licenses is supplied along with the FarmOnline program and a manual package with instructions on installation and use of the program.

Order a start package in connection with new installations.

License keys can only be installed once and only on one farm.

If new documentation is required in a hardcopy format when upgrading to newer version, a start package should also be ordered. However, the updated documentation is included in the program in PDF format.

FarmOnline Explorer is supplied with the following languages:

DA – Danish	IT – Italian
EN – English	RO – Romanian
DE – German	SK – Slovak
NL – Dutch	HR - Croatian
FR – French	TR – Turkish
ES – Spanish	JA – Japanese
FI – Finnish	TH – Thai
SV – Swedish	ZH - Chinese
CS – Czech	PT – Portuguese
PL – Polish	ID – Indonesian
RU - Russian	KO – Korean
HU – Hungarian	VI – Vietnamese



Without start package

**130618 FarmOnline license USB flash drive**

The USB flash drive with licenses is supplied with an Installation Guide (without start package) and the FarmOnline program.

License keys can only be installed once and only on one farm.

Use this item number, when you do not want a manual package.



License extension

### 130610 FarmOnline license extension

Order a license extension together with the required number of licenses when extending an existing configuration.

The USB flash drive with License Extension is supplied with an Installation Guide and the FarmOnline program.

License keys can only be installed once and only on one farm.

Note: An existing installation must be upgraded to the latest FarmOnline version before a license extension.

## 2.1 Basic modules



### 130602 FarmOnline Climate Pigs, 1-house license

A climate license allows monitoring and setting climate functions, managing production and climate data, in-between functions, historical analysis, and alarm management.

Order the number of climate licenses corresponding to the number of climate controllers connected to the application.

It is used together with the following controllers:  
BlueControl pigs.

Note: A 2-house controller requires two licenses.



### 130626 FarmOnline Production Pigs, 1-house license

Monitoring of pig production.

Order the number of licenses that corresponds to the number of house controllers to be connected to the program.

It is used together with the following controllers:  
BlueControl pigs with production add-on software.

Note: A 2-house controller requires two licenses.

## 2.2 Additional modules



### 130615 FarmOnline FarmWatch Pigs, 1-house license

Monitoring of water consumption in pig houses.

Order the number of FarmWatch licenses corresponding to the number of climate controllers connected to the application.

It is used together with the following controllers:  
BlueControl pigs.

Note: A 2-house controller requires two licenses.

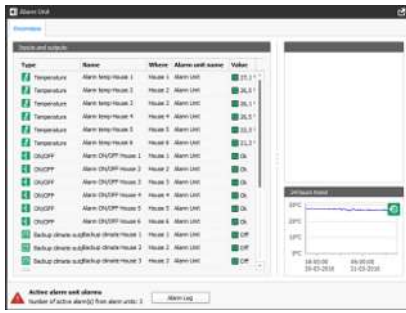


### 140017 SKOV GSM modem

Order a SKOV GSM modem for each PC that needs to be able to handle alarm notification via text messaging.

Each modem should also be equipped with a local SIM card.

Note: Order Alarm Notification License separately.

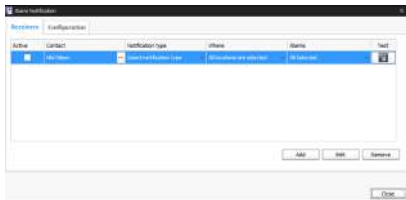


**130628 FarmOnline Alarm, 1-alarm unit license**

Display of alarm status from alarm devices.

Order the number of licenses corresponding to the number of alarm units connected to the application.

Used together with DOL 2400 and DOL 2300 alarm units.

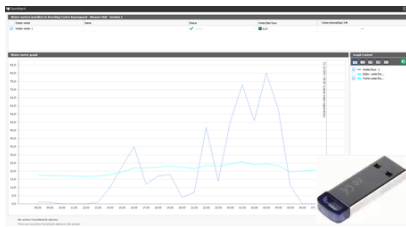


**130604 FarmOnline Alarm notification – 1 farm license**

Alarm Notification makes it possible to receive alarms via text messaging or email.

When using text messaging to receive alarm messages, the function requires connection of a SKOV GSM modem to the PC that handles the function.

Order the number of licenses that corresponds to the number of farms.



**130608 FarmOnline AirClean, 1-controller license**

Display of operating data from the air cleaning controller.

Order the number of AirClean licenses that corresponds to the number of air cleaning controllers to be connected to the program.

Used together with the air cleaning controller DOL 356.



**130625 FarmOnline Web Access, 1-house license**

FarmOnline Web Access is used when the user wishes to access FarmOnline Explorer from outside the farm, for instance via the FarmOnline Web Explorer or the mobile app.

With Web Access, you can access FarmOnline Explorer data over the Internet, so it can be viewed on, for instance, a mobile app, even when you are not on the local network.

Web Access allows the system to automatically connect FarmOnline Explorer on a local network to the system's FarmOnline Explorer app.

Order the number of licenses corresponding to the number of houses.



**130619 FarmOnline Remote Access, 1-house license**

FarmOnline Service Access provides access to the DOL 2400 and DOL 2300 BlueControl series display and, thus, all their menus and functions.

Order the number of Remote Access licenses corresponding to the number of controllers accessed from the application.

## 2.3 Accessories



### FarmOnline Explorer app

Allows smartphone access to data from the controllers.

The FarmOnline Explorer app lets users access their SKOV controllers via the FarmOnline Explorer PC management program.

From anywhere with Internet access, the user can access live data (real time) in any livestock house via the smartphone/tablet and view production and climate data and alarms.

The app can be downloaded for free from Apple App Store, and Google Apps Marketplace.

You must have a FarmOnline Web Access license on the farm.



### 130491 Surveillance camera Small PoE

It is used for surveillance using images even in the dark using built-in IR light.

Surveillance camera Small  $\varnothing 131 \times 102$  mm can rotate 355 degrees, tilt up and down and zoom in and out.



### 130492 Surveillance camera Large PoE

It is used for surveillance using images even in the dark using built-in IR light.

A surveillance camera Large  $\varnothing 169 \times 161$  mm can rotate 360 degrees, tilt up and down and zoom in and out.

It provides better images and has a higher zoom than 130491.

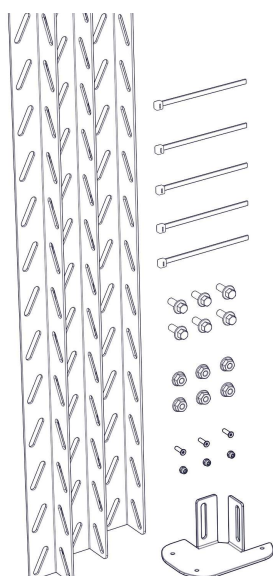


### 301216 Network cable CAT6 shielded 0.5m

### 301217 Network cable CAT6 shielded 2 m

### 301218 Network cable CAT6 shielded 10 m

### 301219 Network cable CAT6 shielded 30 m

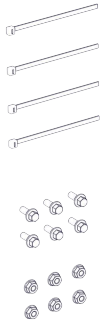
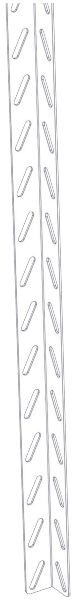


### 140326 Surveillance camera mounting kit basic

Is used when mounting a surveillance camera in houses where the surveillance must be free of obstacles.

When using the mounting kit basic the surveillance camera can be mounted at a distance of 0-1000 mm from the ceiling.

The kit consists of mounting plate, 3 mounting profiles with holes and a screw kit.



**140323 Camera mounting kit next**

Additional purchase when mounting a surveillance camera in houses if the distance from the ceiling is bigger than 1000 mm.

The kit consists of a mounting profile w/holes and a screw kit.

### 3 Technical data

Minimum requirements on PC running FarmOnline Explorer	
Processor:	Intel 5, Generation 9 or 10 (e.g., I5 10400T)
RAM:	8 GB (recommended)
Hard disk:	SSD hard drive.
Graphics card:	DirectX 9.1 compatible
Monitor:	1920 x 1080 minimum resolution
Font size on PC:	Standard 96 DPI
Network interface card (Ethernet):	The PC must be connected to the controllers and FarmOnline WebLink via LAN.
Operating system (with original license):	Windows 10 64bit It also supports Windows 11.

FarmOnline WebExplorer requirements on Internet browser program version			
Supports the following Internet browsers in the specified or later version on Windows and MAC:			
Internet Explorer 8	Chrome 14.0	FireFox version 7.0.1	Safari version 5.1.1
Requirements for smartphone and tablet version:			
Android 4.X or more recent	Apple IOS 6 or more recent		

Application version requirements				
Supports the following climate controllers (one-house and two-house variants) in the specified or later version:				
Controllers in a LAN Network:				
License	BlueControl	DOL 63X	DOL 234F	DOL 2400/2300
FarmOnline Climate Pigs 1-house license	8.0	5.0	7.5	-
FarmOnline Production Pigs 1-house license	8.0	5.0	-	-
FarmOnline Remote Access 1-house license	8.0	5.0	-	2.0
FarmOnline Alarm 1-alarm unit license	-	-	-	2.0

Controllers in an RS485 Network with FarmOnline WebLink:
DOL 356 ver. 6.2.2.

Note: Up to 20 controllers can be connected to FarmOnline WebLink.

In a standard SKOV network, FarmOnline Explorer may handle up to:	
BlueControl pigs-1 (only climate)	40
BlueControl pigs-2 (only climate)	20
BlueControl pigs-1 (with dry feeding)	25
BlueControl pigs-2 (with dry feeding)	12

Minimum network requirements on the farm
There must be a LAN network (Local Area Network) on the farm. It can be a cable or wireless network.

<b>Minimum network requirements on the farm</b>	
All SKOV controllers and computers installed with FarmOnline Explorer must be connected on the same sub-network on the LAN network.	
Specifications for LAN network:	
Minimum data rate:	100 Mbit/s full-duplex
Maximum delay:	<100 ms
Average delay:	< 5 ms (status can be seen in FarmOnline Explorer Network Information)
Packet loss:	<1% (status can be seen in FarmOnline Explorer Network information)
Download:	Minimum 1.0 Mbps
Upload:	Minimum 0.5 Mbps
Static IP for all SKOV controllers in a SKOV network is strongly recommended. All controllers should also be assigned a private class IP within the network. The private class IP ranges are: 10.0.0.0 – 10.255.255.255 172.16.0.0 – 172.31.255.255 192.168.0.0 – 192.168.255.255	
ZeroConf IP address allocation is not supported.	
For SKOV A/S to provide optimal service, it is recommended to use a Windows version supporting the English language, such as Windows Professional or Ultimate. If system troubleshooting is required, Windows may be required to switch to English before support can be provided.	

There are a number of network requirements for the different services. Services are, for instance, the FarmOnline Mobile app. If the requirements are not met, the different services will not work or will seem very slow.

Note that the Internet connection must be stable and the services must not be blocked by firewalls, see also Manual Adjustment of Firewall Settings.

<b>Description</b>	<b>Upload speed</b>	<b>Load time of Remote Access</b>
Controller SW <b>7.0</b> / Alarm SW <b>4.0</b> and higher	8.0 Mbps	Approx. 15 seconds
Controller SW <b>7.0</b> / Alarm SW <b>4.0</b> and higher	4.0 Mbps	Approx. 30 seconds
Controller SW <b>7.0</b> / Alarm SW <b>4.0</b> and higher	2.0 Mbps	Approx. 45 seconds
Controller SW <b>7.0</b> / Alarm SW <b>4.0</b> and higher	1.0 Mbps	Approx. 100 seconds
Controller SW before <b>7.0</b> / Alarm SW before <b>4.0</b>	0.5 Mbps	Approx. 15 seconds



SKOV A/S • Hedelund 4 • Glyngøre • DK-7870 Roslev  
Tel. +45 72 17 55 55 • [www.skov.com](http://www.skov.com) • E-mail: [skov@skov.dk](mailto:skov@skov.dk)

