The main feature of the XPSF is the color display screen (3.5") with 320x240 dots resolution with led backlighting. XPSF is made in DIN 96x96 format and the module dimensions are 96x96mm.

The user interface is easy and friendly. The easy touch screen system gives both the typical "easy to use" approach of a touch screen system and the strength and mechanical protection of a polycarbonate IP54 keyboard.

At every screen the function keys display a different graphic making the program very user friendly.

The user can select the display language: all the wordings, acronyms and "help" texts for programming assistance will be displayed in the chosen language.

Each programming step has its own help screen so the program has a "built in" instruction manual.

Temperature set

Temperature set of the starting ventilation (step 1). Below this temperature the system ventilation using Air exchange (if activated).
XPSF manages the climate control of the Ventilation system (0 ... 100% speed adjustment), of the Heating system of the Flaps (air inlet).

In addition to ambient temperature, ventilation can be affected by humidity and external temperature.

You can program the operating calendar so that the program automatically adapts to the animal growth curve day by day.

All the climate parameters controlled by the XPSF are recorded and can be exported via USB key.

Remote supervision ensures complete PC management of all XPSF connected in the network.
inputs and outputs

- Ventilation temperature probe
- Humidity probe
- Outdoor temperature probe
- Air inlet potentiometer
-icontrol output is available as standard for 230V max 6 Amper fans.
- In the case of higher loads, the SCSL extension is available to increase the capacity in multiples of 6 Amper.
- In case of inverter drive, a 0-10V control output is available.
- Auxiliary ventilation command
- Ambient heating command
- Inlet flap command
- Alarm command
- Ventilation
- Air inlet flap

Other available connections
- USB plug: XPSF has a USB plug inside.
- XNET: Network connection card (optional) for XPFC processor (see remote supervision).
delivery room / weaning example

- Air inlet
- Fan
- Ambient humidity probe (optional)
- Outdoor temperature probe (optional)
- Flap 1
- Ambient temperature probe
- Heating
- XPSF
- XPSF ventilation control
XPSF records all the parameters of the environment

Multiple levels of registrations:

- Daily data, a recording for each day of the cycle
- Data of every single day with sampling every 15 minutes
- Full cycle data

The daily archive records the following parameters:

- Temperature
- Humidity
- Outside temperature
The communication with the outside world is performed by USB key.

- **Export archives**
  XPSF save in the USB memory a file containing all the day by day recorded data of the cycle.
  Connecting the USB key to a PC and by using the XPSF Dialogue software you can browse the recorded data in grid or graph formats.

- **Importing / saving the setting**
  You can save a file with all back-up infos on a USB file.
  Saved settings can be uploaded on XPSF anytime by a user friendly procedure.
Remote supervision of XPSF processors grants the full management of system by PC.

The XPSF Net Pro supervision software enables the full remote control of network connected processors. ULAN peripheral is connected to PC through a USB connection. XPSF – ULAN connection is done by a simple 3 wires cable. In all cases where ULAN cannot be cabled to XPSF we can supply TR04 radio-modems with a reach of 400 mt.

Components for creating a supervision system:

- **ULAN**: Network server PC (with USB connection)
- **XNET**: Network adapter card (one for each XPSF)
- **TR04**: Radio-modem 485 (optional, to be used only when it is not possible to use the cable)
sample screenshots

- **Home**
  - view screens

- **Settings**
  - Heating
  - Ventilation
  - Alarm
  - Calendar

- **Temperature**
  - temperature set selection
  - temperature settings

- **Ventilation**
  - ventilation view
  - check ventilation selection

- **Heating**
  - heating view

- **Flap**
  - inlet flap view
  - inlet flap working analysing

- **Check Control**
  - check control screens
  - check ventilation selection
  - temperature set conditioning

- **Outdoor Temp. Cond.**
  - outdoor temperature conditioning

- **Flap Working Anal.**
  - inlet flap working analysing
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XPSF</td>
<td>Pig house environmental control unit</td>
</tr>
<tr>
<td>SX</td>
<td>Temperature probe. XPSF is supplied with 1 SX: any other probe must be ordered separately</td>
</tr>
<tr>
<td>RHR</td>
<td>Humidity probe 0...100%</td>
</tr>
<tr>
<td>HA20s</td>
<td>Power supply for RHR</td>
</tr>
<tr>
<td>PT</td>
<td>Flap response potentiometer (1 KOhm)</td>
</tr>
<tr>
<td>USBP</td>
<td>External IP65 USB socket (to be mounted externally, to access the USB without the need to access inside the XPSF)</td>
</tr>
<tr>
<td>SCSL</td>
<td>6A power extension module for continuous control of single-phase fans</td>
</tr>
<tr>
<td>FX01</td>
<td>Drive electrical box for three-phase gear-motor (specify motor power), with 1 SX temperature probe included</td>
</tr>
<tr>
<td>CSTX</td>
<td>Thermal trip contact (FX01 option). The intervention of the thermal shutter flap is signaled and managed by the XPSF</td>
</tr>
<tr>
<td>HMOV</td>
<td>0-10V gear-motor / ventilation control manualizer</td>
</tr>
<tr>
<td>HMVU/W</td>
<td>0-10V gear-motor / ventilation control manualizer (with IP54 box for wall mounting + gasket + transparent cover)</td>
</tr>
<tr>
<td>XNET</td>
<td>Network nodal point</td>
</tr>
<tr>
<td>ULAN</td>
<td>Network server Pc (with USB connection)</td>
</tr>
<tr>
<td>TR04</td>
<td>Radio-modem 485 (IP55 junction box with power supply 230/12v)</td>
</tr>
</tbody>
</table>
options available
# XPSF performance comparison with Our other models

<table>
<thead>
<tr>
<th>Performance</th>
<th>XPSG</th>
<th>XPSF</th>
<th>SC6G</th>
<th>SC6F</th>
<th>SC6E</th>
<th>SC6D</th>
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</thead>
<tbody>
<tr>
<td>Color graphic display</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Fan speed triac control 230V 6A (on board)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
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<tr>
<td>0-10V inverter output</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
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<tr>
<td>Auxiliary ventilation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Tachometer input</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Ambient heating</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Floor heating</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<td>IR lamps heating</td>
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<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Flap</td>
<td>Yes (2)</td>
<td>Yes (1)</td>
<td>Yes (2)</td>
<td>Yes (1)</td>
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<tr>
<td>Cooling</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Humidity probe (provision)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Outdoor temperaturure probe (provision)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>CO2/NH3 probes (provision)</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Alarm</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Growth curve calendar</td>
<td>Yes</td>
<td>Yes</td>
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<td>Daily data archive</td>
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<td>Yes</td>
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<tr>
<td>Export / import data with USB stick</td>
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<td>No</td>
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<td>PC network connection</td>
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