

ORION-FWS • Feed weighing computer



The ORION-FWS is a computer for controlling a feed weigher that serves the feed to one or more houses. The ORION-FWS-M or ORION-FWS-S can be applied when respectively a mixing weigher or silo weigher is being used. The ORION-FWS is a stand alone computer. Multiple feed types (max 9) can be mixed by means of a mixing ratio. With the ORION-FWS you can use curves at important settings, when for example the feed distribution is automatically adjusted to the age of the animals.

Internal / external houses

The ORION-FWS controls internal and/or external houses. The external houses are controlled via the ORION-FWS by means of an ORION-P poultry computer with build in feed distribution control. The ORION-FWS controls the feed and water consumption in the internal houses. When a feed weigher is used, the feed consumption is measured and automatically subtracted from the silo content. Therefore, you always have up to date information about the supply of feed.

Multiple feed types

When making use of multiple feed types, one or more feed types might run out, when this happens you can set the ORION-FWS to;

- Replace the feed type (no alarm)
- Ignore the feed type (no alarm)
- Not to replace the feed type, (alarm, feeding is stopped)

Silos

If your feed supplier has filled up the silo(s), you can enter the supplied amount of feed into the ORION-FWS computer, the supplied amount is added to the actual silo contents. When silo content is under minimum alarm level, the ORION-FWS will give a warning. For each silo you can enter which feed type is in the silo.



Stationsstraat 142
5963 AC Hegelsom
The Netherlands

T +31 (0)77 327 5020
F +31 (0)77 327 5021
info@hotraco-agri.com
www.hotraco-agri.com

Hotraco Agri is a globally operating supplier of innovative computerized systems for use in the pig and poultry sectors specialised in creating and maintaining an optimum indoor climate. Hotraco Agri's main focus is on the development and manufacture of customized computers that regulate, control and monitor the overall animal house system. From climate control and air conditioning, feed and water control, animal weighing, egg counting to fire safety. Over 100 employees serve customers on all continents with innovative and technically advanced systems. The fact that Hotraco Agri has its own R&D and development department means that it is ALWAYS able to deliver customized products and develop problem-specific solutions.

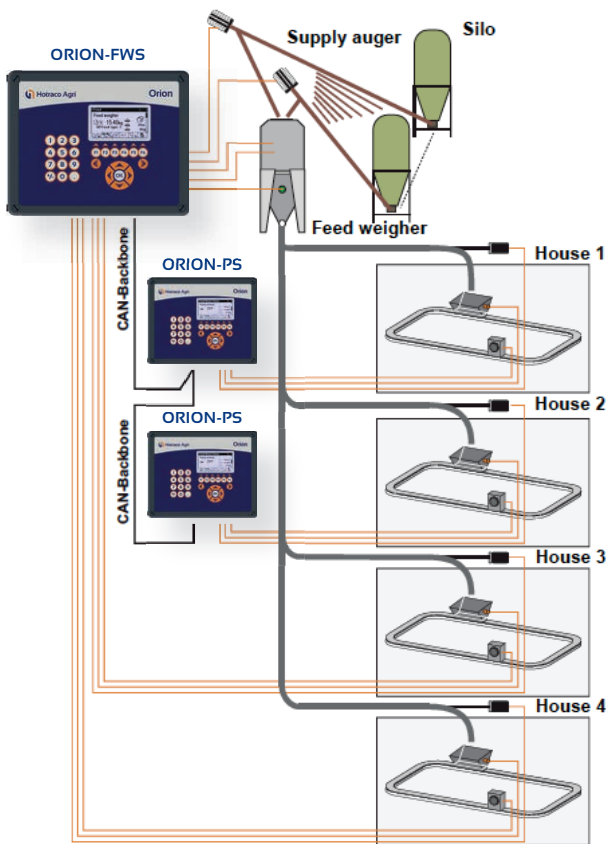
Helpdesk 24/7

Hotraco's helpdesk and service centre is available 24/7. Our team has the possibility to monitor and control our clients' systems, wherever in the world, via state of the art ICT technology.

FEED / WATER DISTRIBUTION CONTROL

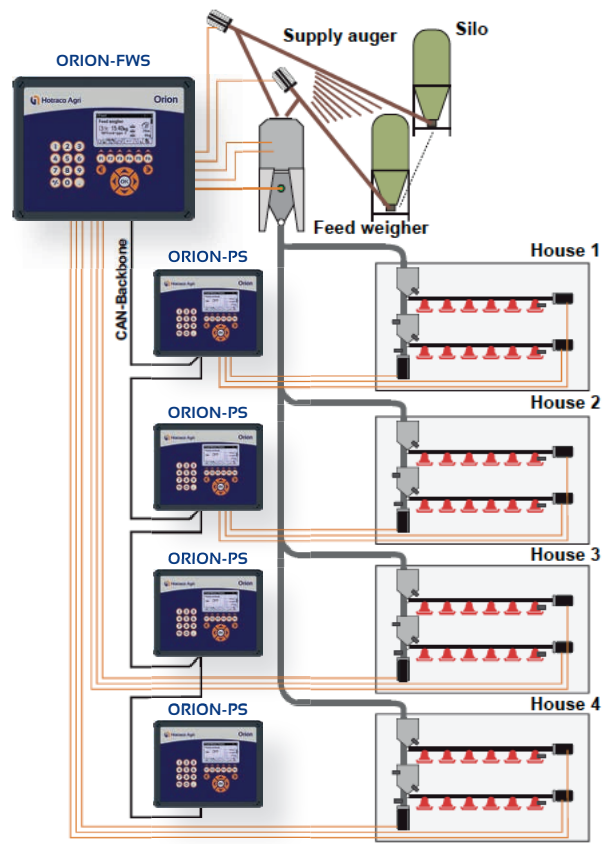
Feeding pans	Chain feeding	Water distribution
On / off times	Start / runtime	On / off times
Quantity per feeding time	Quantity per feeding time	Quantity per starting time
Quantity per day	Quantity per day	Quantity per day

DIFFERENT ORION-FWS CONFIGURATIONS



ORION-FWS feeding chains

- Two internal and two external houses
- Climate control in two houses by means of ORION-PS, in remaining houses by means of climate computer X



ORION-FWS feeding pans and hoppers

- Two internal and two external houses
- Climate control by means of two ORION-PS computers and two Sirius-CL climate computers

Management

A number of data is collected in the management group and can be displayed at any given time, such as: feed consumption, up to date silo content and feed type per silo. The water / feed consumption per house is registered (today, yesterday and the day before yesterday). Also the total consumption is registered.

Alarm

The ORION can trigger a "hard" or a "soft" alarm. The "soft" alarm shows an alarm description on the flashing display, a "hard" alarm opens the additional alarm contact. The alarm calls that have been solved are stored into the alarm history with corresponding start / end times.

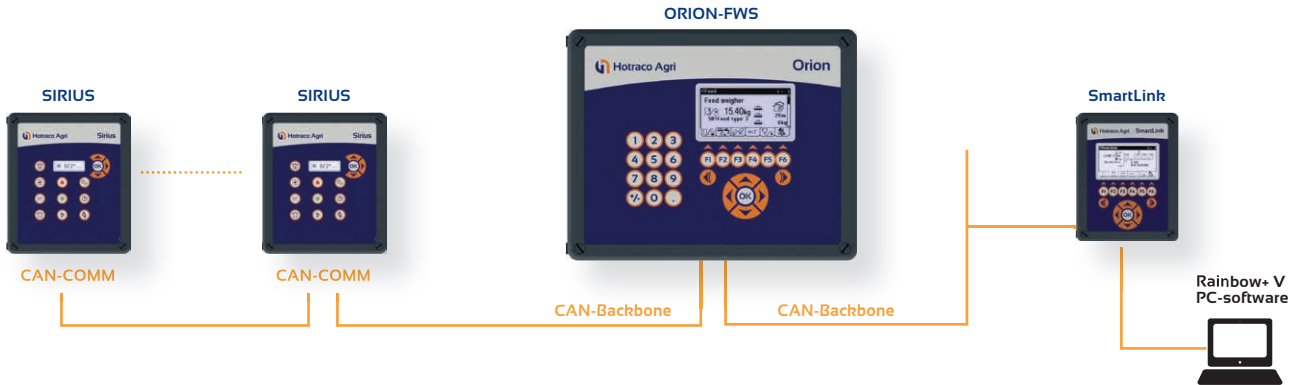
Diagnosis

In the diagnosis group additional functions with extra information can be retrieved. For example: the status of the feed weigher release valve and the receiving bin sensor at feed weigher level. At house level you can retrieve for example the status of the feeding lines.

Communication

The ORION uses different communication protocols:

- Can-Backbone protocol
- Can-Local protocol
- RS232 protocol
- USB protocol

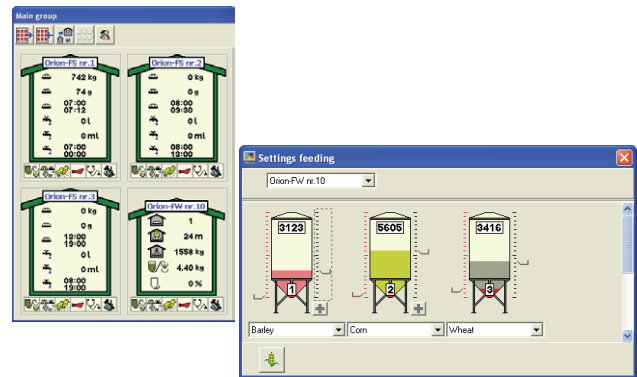


Communication with other computers

By using the CAN-Backbone communication, the ORION can be placed into a network consisting out of multiple ORION or Sirius computers. With an additional SmartLink, this network can be connected to a PC or modem. Via RS232 the ORION can communicate directly with a modem or a PC, however, using the RS232 you can not create a network. The ORION is also equipped with USB.

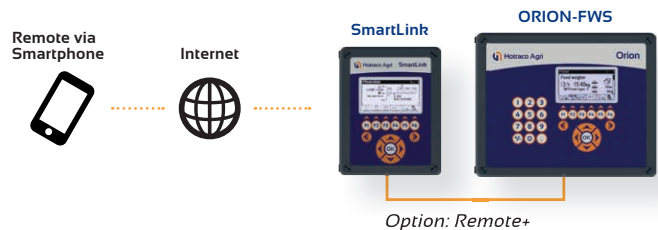
ORION-FWS and Rainbow+

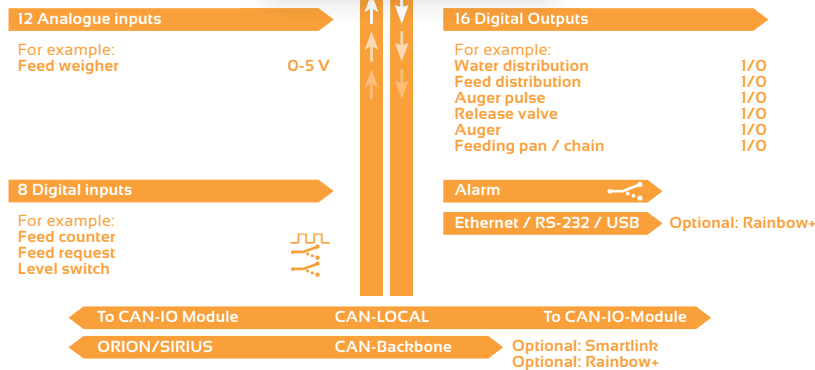
By using the advanced communication module and the Rainbow+ management system, the ORION-FWS can be remote controlled from your home pc. Here too, user friendliness and graphic display were the points of departure. At a single glance the user gets an overall view of all his production houses, what systems in said houses are activated and if an alarm has been released in one of them.



ORION-FWS and Remote+

With the optional Remote+ package it is possible to control your ORION computer by means of a handheld computer. The Remote+ software needs to be installed on your, smartphone or netbook. Through the internet, a connection between the SmartLink and your handheld needs to be established, by using the SmartLink with Remote+ option. The ORION control panel appears on the handheld display, therefore the ORION operation on the handheld is completely identical to the ORION itself.





TECHNICAL SPECIFICATIONS

Electrical

Mains	230 Vac \pm 10 % , 50 / 60 Hz
Power consumption	max. 25 VA
Fuse	T 500 mA (dim. 5 x 20 mm)

Analogue inputs

0...5 V	0-5 V ($R_i = \infty \Omega$)
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Digital inputs

Counter	NPN / PNP sensor 12..24 Vdc 8 mA max. 10 Hz
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Digital outputs

Relay output K1...K16	0.5 A, 230 Vac
Alarm relay	0.5 A, 24 Vac / dc

Complies with EC-directives

EMC	2004 / 108 / EC
Low tension	2006 / 95 / EC

Power 24 Vdc

Power	24 Vdc / max. 25 mA
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Power 12 Vdc

Power	12 Vdc / max. 100 mA
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Mechanical

Operating temperature range	0...40 °C
Dimensions (H x W x D)	278 x 348 x 117 mm
Encasing	IP 54 ABS synthetic
Weight	approx. 4 kg