



Monitoring Solutions

Keep Track on Your Production

MONITORING SOLUTIONS



A revolutionary API connection

Multiple DATA about your production delivered automatically to your server

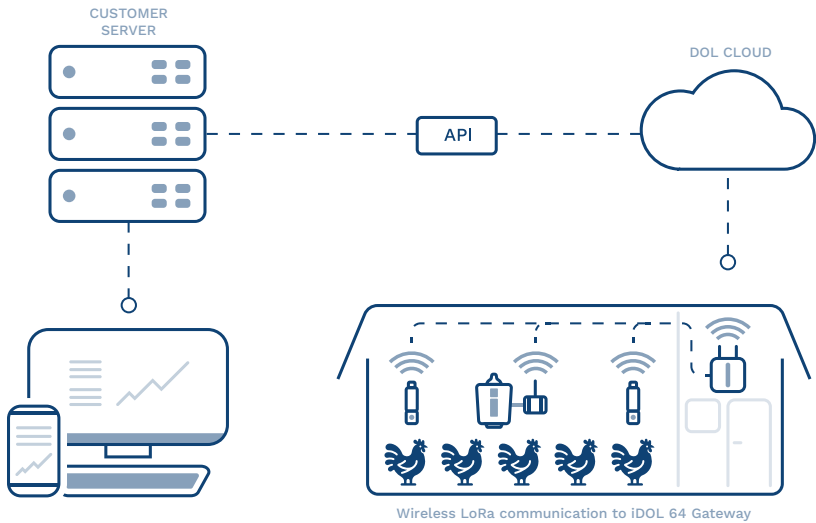
Managing a livestock production or a greenhouse requires a great amount of knowledge and skills. You must know about the animals and plants and how to optimize conditions around them to ensure an optimum production.

But having continuous real-time data about the production available is underestimated. Data gives you an exact image of how conditions are and sometimes reveals things you had no clue about. E.g. data can reveal an accumulation of CO₂ or a high temperature in a corner of your house that does not exist elsewhere. Thus, data can be used to take the right decisions instead of basing them on gut feelings.

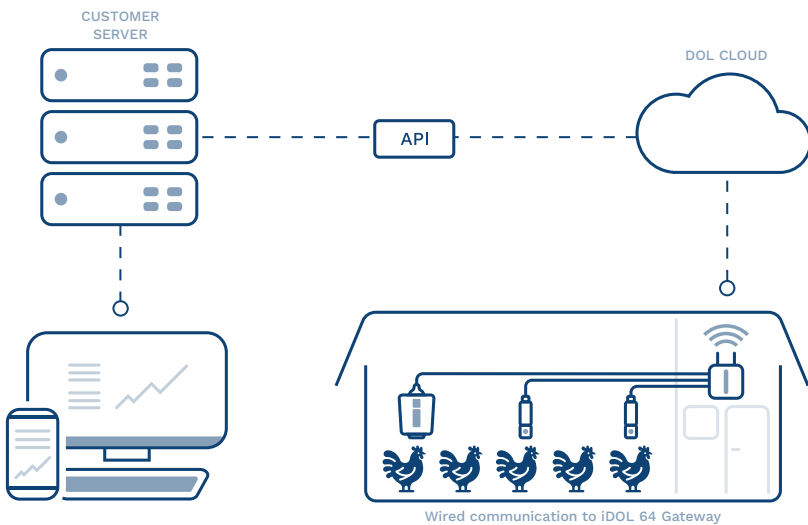
With our Monitoring Solutions you can receive real-time data from our robust climate sensors on:

- Temperature
- Humidity
- CO₂ level
- Ammonia level
- Water consumption

We provide the data directly to your server through an API that sends data every hour around the clock. It's up to you how you would like to use the data and how you want to show it. All data from the sensors are safely delivered to you with secured access.



Data is sent wirelessly from the sensors or via a LoRa converter to the iDOL 64 Gateway. The gateway sends the data to the DOL Cloud and through the API directly to your server every hour around the clock. Save the data on your server to keep it as the data is deleted from the DOL Cloud.





Wireless LoRa Communication

Less wires and no internet needed

In a lot of farmhouses or greenhouses there is a need for wireless communication from the sensors to the management systems' server.

A regular setup with sensors and management system requires sensors wired to an internet connection. But a lot of houses do not have internet or very bad connection, and the wiring is a lot of work and sometimes an undoable job. Sensors could be mounted far away from the internet connection or even outside the house.

This is where our iDOL 64 LoRa Gateway proves its worth.

With the iDOL 64 LoRa Gateway you can now connect sensors wirelessly via LoRaWAN. The only wires you need are power cables. All communication between the sensors and your server is wireless.

Our gateway has a modem with a data SIM card and sends data to the DOL Cloud to let you receive continuous data directly to your server through our API.

The Gateway is design to enable direct connection of sensors via wires along with wireless LoRaWAN connected sensors. The number of LoRa sensors that you can add to an iDOL 64 LoRa Gateway depends on different factors. Contact our Sales Professionals to get the right amount for your setup. You can add up to 12 analog 0-10V sensors to an iDOL 64 LoRa Gateway.



WITH-STANDS HARSH CONDITIONS

iDOL 139 LoRa is protected by a sturdy casing and behind a carefully selected filter. The sensor is IP67 protected against dust and water ingress and withstands temperature swings and high levels of humidity and ammonia.

LoRa Sensors

iDOL 139 LoRa Temperature, Humidity, and CO2 Sensor

iDOL 139 LoRa is a smart 3-in-1 sensor combining measurement of both relative humidity, temperature, and carbon dioxide (CO2). Since the sensor measures three important elements of the environment it makes for an easier installation, less maintenance, and a more cost-effective solution.

NO NEED TO REMOVE BEFORE CLEANING

iDOL 139 LoRa can be supplied with a protection cap for protection of the sensor during washing and disinfection, even during high-pressure cleaning.

BUILT-IN LORAWAN CONVERTER FOR WIRELESS COMMUNICATION

The sensor has a built-in LoRaWAN converter that sends data wirelessly to the iDOL 64 LoRa gateway.

POWER CABLE INCLUDED

A 2-meter power cable for 24 VDC is included but we also offer external power supply used for supplying 80-240 VAC and a 2 meter cable with M12 plug and sealing plug for wired connection to the gateway.

[Click here to read more](#)

iDOL 53 LoRa Ammonia Sensor

iDOL 53 LoRa is a sensor designed to continuous stationary monitoring of ammonia (NH₃) concentration.

LONG LASTING SENSOR

The sensor features accurate ammonia measurements in both low and high concentrations, negligible cross sensitivity to other gasses, and a long lifetime, without the need for calibration.

The easily replaceable filter and sensor element make the sensor last much longer than other ammonia sensors on the market.

The iDOL 53 LoRa measures ammonia concentrations from 1.5 to 100ppm.

NO TUBES OR PUMPS NEEDED

The iDOL 53 LoRa can be mounted directly in the house, without any need for tubes or pumps.

POWER CABLE AND BATTERY INCLUDED

The sensor has a 2-meter cable with M12 plug that is connected to a battery connected to the LoRa converter.

[Click here to learn more](#)





iDOL 90 Water Meter with LoRa converter

Keeping an eye on the water consumption helps identifying leaks or too much water consumption of animals. The iDOL 90 Water Meter measures the water consumption and can be integrated in any cold water system.

When connected to our LoRa converter, data from the Water Meter is send wirelessly to our iDOL 64 LoRa Gateway.

iDOL 90 is designed for 1 liter per pulse. The Water Meter supports accumulated or delta pulse counter. The housing of the water meter is made of composite polymer plastic and fitted with a filter in the entrance.

The flow can be read on a mechanical counter and via an externally connected counter, which is controlled by a switch incorporated in iDOL 90.

A small impeller is placed in the flow pipe of iDOL 90. It is rotated by the water flow. The rotation of the impeller is directly proportional to the flowing water quantity per unit of time. The rotations are transmitted through a gear to the mechanical counting mechanism.

The electric switch is activated by a magnet mounted on a gear.

[Click here to learn more](#)



Claus Møller Pødenphant
Monitoring Solutions

Ext.: +45 7217 5627

Mobile: +45 5213 5627

cmp@dol-sensors.com

Connect with Claus on LinkedIn:
www.linkedin.com/in/clauspodenphant

dol-sensors A/S
Agro Food Park 15
8200 Aarhus N Denmark
Tlf. +45 72 17 88 88
Fax +45 72 17 59 59
www.dol-sensors.com

