

CLIMATE

Climate sensors to ensure comfort
and productivity



dol
SENSORS

MAKING SENSE IN YOUR PRODUCTION

CLIMATE

We produce climate sensors to ensure productivity and comfort in animal production.

dol-sensors manufactures sensors for temperature, humidity and CO2 amongst other things; both as single-function and multi-function sensors. The climate sensors record changes in the livestock house climate, and can also be used, for example, in horticultural enterprises and other industrial production facilities where there is a need to record changes in the climate conditions.



OUR CLIMATE SENSORS

- Measures all conditions in the livestock house
- Very accurate and reliable measurements
- Designed for aggressive livestock house environment
- Single-function and multi-function sensors



Humidity / Temperature



DOL 15 - TEMPERATURE SENSOR

DOL 15 is an all-purpose fully electronic temperature sensor, with adjustable offset and amplification. The electronics of the sensor is embedded in a special plastic enclosure, making it well suited to livestock house environments that require an especially sturdy design. The DOL 15 has a built-in voltage amplifier (0.1 V/°C) enabling direct connection to a control unit. A detachable cap protects the sensor element, which is coated with a corrosion-resistant enamel.

The DOL 15T version is a temperature sensor specially designed for mounting on heating pipes. It is applicable in combination with 2-way control valves and is controlled by the climate computer.



DOL 104 - HUMIDITY SENSOR

The DOL 104 is a high-precision sensor for measuring relative humidity designed for use in livestock houses but is also well suited for a number of industrial applications. The sensor has an analogue output with a very low output resistance and full protection against short circuits and wiring failures. The special sensor element and the built-in filter enable application in livestock houses with constantly high humidity. A microprocessor controls the sensor and has a two-colour light emitting diode (LED) for communication of operation status and error diagnostics. A protective cap is available, eliminating the need to remove the sensor when cleaning the livestock house.



DOL 114 - HUMIDITY AND TEMPERATURE SENSOR

The DOL 114 is a high-precision sensor for measuring both relative humidity and temperature simultaneously. It is used in livestock houses but is also well suited for a number of industrial applications.

The sensor has the same excellent properties as the DOL 104 digital humidity sensor. Like DOL 104, the DOL 114 is available in various output versions, such as 0-5V, 0-10V and 4-20mA.



Gas

DOL 19 - CO₂ SENSOR

The DOL 19 is a carbon dioxide/CO₂ sensor that is primarily designed for measurements in livestock houses. The sensor measures the CO₂ level in the livestock house to ensure the animals enjoy optimum climate conditions. The sensor is also used to monitor any fault conditions in livestock houses with direct combustion.

A filter in a sturdy housing protects the sensor. The sensor is supplied with a connector and cable solution that makes it simple to disconnect and remove the sensor, e.g. before cleaning and disinfection of livestock houses. The DOL 19 features both a 0-10V and a 4-20mA output.

DOL 53 - AMMONIA SENSOR

The award winning DOL 53 is a sensor designed to continuous measurement of ammonia (NH₃) concentration in livestock houses. The negative effects of high ammonia concentration in livestock production is well known, and with the introduction of the DOL 53 the farmer is now finally able to monitor the ammonia concentration continuously and take corrective actions if ammonia levels are increasing.

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

The DOL 53 measures ammonia concentrations from 1.5 to 100 ppm, with an output range of 0 to 10V.





Light / Weather



DOL 16 - LIGHT SENSOR

The DOL 16 is a sensor designed to measure light intensity in terms of lux. It has been developed to handle the harsh livestock environment, but is also well suited to a number of industrial applications.

The light intensity, or illuminance, is an important factor in optimizing the growth of broilers and optimizing egg production by layers. An active control of light intensity by use of DOL 16 will help achieving high productivity while also saving energy.

The DOL 16 sensor is available with various output ranges, ranging from 0-50 lux all the way up to 0-1000 lux.



DOL 58 - WEATHER SENSOR

The DOL 58 measures wind direction, wind speed and air pressure. Wind speed and direction are measured using ultrasound, which means the weather sensor has no moving parts. Eliminating the impellor and wind vane of typical weather sensor, allows the unique DOL 58 to be extremely robust, reliable and service-friendly.

DOL 58 is available with 0-10V or 4-20mA outputs. A version with temperature output instead of air pressure is also available.



Pressure / Accessories

DOL 18 - PRESSURE SENSOR

dol-sensors' electronic DOL 18 sensor is used for very precise measurement of negative pressure.

The DOL 18 is used primarily for measuring negative pressure in livestock houses and to trigger an alarm if the pressure is too low or too high, but it can also be used in other environments where there is a need for measuring negative pressure.

DOL 18 is available with a wide selection of measuring ranges from 25Pa to 1250Pa, and with 0-5V, 0-10V and 4-20mA outputs.

ACCESSORIES - VARIOUS MOUNTING OPTIONS

Climate sensors are often used in livestock houses that are subject to regular cleaning. It is therefore important that the sensors can be easily dismantled and refitted. dol-sensors offers various plug systems to allow for an easy and service friendly installation.

Our in-house R&D resources allows for custom-designed versions to meet specific needs from our customers. Our modern and flexible production facilities are equipped to produce sensors in small and large batches at very competitive prices.

dol

S E N S O R S

dol-sensors develops, produces and markets sensors for measuring feed, climate and production parameters. The products are primarily used for automated tasks within the agriculture and feed industries. Over the past 40 years dol-sensors has developed its range of sensors together with leading companies in this field.

Our sensors are developed and manufactured at in-house facilities in Denmark, which allows for effective processes and a quick and flexible turnaround.
We know how to make sense in your production.

For more information on dol-sensors visit our website at
www.dol-sensors.com



Climate



Feed



Production