DATA ACQUISITION **APPLICATION NOTE**









Agriculture and Plant Research

Plant growth conditions

Air, soil and leaf temperatures for many different plants, outside glasshouses.

Glasshouse conditions

For use as a portable monitor to log solar radiation in greenhouses.

Produce storage on the farm •

General use to monitor agricultural produce storage temperatures.

Monitoring temperature in grain warehouses and measuring air flow through grain in the tropics.

Weather conditions for agrochemical treatment

Mobile weather station, recording temperature, humidity, wind speed/direction and solar radiation before and after agrochemicals are applied.

Slug research

Monitoring the temperature and humidity of surface soil, relating results to slug activity in potato crops.

Animal parasite research

Logging water temperature, soil temperature and above-ground humidity, linking the results to animal parasite activity. Also monitoring conditions in temporary bodies of water such as puddles.

Fly traps

Monitoring wind speed and direction in connection with research into fly traps to protect test crops.

Herbicide testing

Recording dissolved oxygen temperature, pH and conductivity in field trials testing aquatic herbicides.



DATA ACQUISITION APPLICATION NOTE



Agriculture and Research

• Animal building temperatures

Animal housing studies.

Research into conditions which promote egg-laying/incubation. Monitoring temperature in poultry houses to ensure optimum ventilation and temperature control and thereby increase efficiency.

• Crop diseases

Measuring temperature and humidity of crops to establish the conditions in which mildew and other diseases occur.

• Field drainage experiments

Monitoring water table readings in drained and un-drained soils.

Monitoring soil temperature, drain flow and rainfall in field drainage experiments.

• Silage clamps

Monitoring temperature in silage clamps in a research project to delay decay of silage in hot countries.

Mushroom production

Monitoring temperature in mushroom production units.

• Research on sheep

Monitoring walking, feeding, deep body temperature and either skin, wool outside or wool inside coat temperature in sheep in experimental paddocks.

• Sheep enclosures

Monitoring the room temperature and humidity in sheep enclosures.

• Transport of animals

Monitoring temperature and humidity of animals during transport.

• Grain chilling

Monitoring air and grain temperature, relative humidity, air flow and electricity consumption of grain chilling system in order to assess the system's efficiency.