

# Kestrel Environmental Meters for Agriculture



**Kestrel meters** are designed to meet the needs of livestock production, crop production, and animal health. Every producer, grower, and agriculture professional knows that adverse environmental conditions can cause production losses. Best management practices require current knowledge of local pen, field, barn, truck, and/or ground conditions.

Our line of Kestrel Agriculture meters provides that level of micro-climate data with measurement options including air speed/wind speed, volume air flow, temperature, relative humidity, Delta T, temperature-humidity index, heat load index, accumulated heat load units, and more!

**Get to know our Kestrel Agriculture Line and maximize livestock and crop performance!**

## Measure. Manage. Maximize.



**Objective and accurate measurements at pen level are critical to planning your heat management strategy.**



## Kestrel DROP D2AG Livestock Heat Stress Monitor

Small, portable, and wireless, this useful data logger can be used to monitor all livestock environments both inside and out (in the barn, during transport, at the auction, during an exhibition show, anywhere livestock is housed.) Unmanned, unattended, uninterrupted data logging with LiNK wireless data connectivity offers users easy access to current and logged historical data.



## Kestrel 5000AG Livestock Environmental Meter

A complete tool designed to provide measurements and calculations needed for herd health, ventilation assessments, storage management, nutrition strategy development, livestock protection, and more. Current and logged data can be transferred to a iOS/Android wirelessly with the LiNK wireless communication option and Kestrel LiNK app, or to a Windows/Mac with either an additional Kestrel LiNK Dongle or waterproof USB Data Transfer Cable accessory.



## Kestrel 5500AG Agriculture Weather Meter

A comprehensive tool designed to meet the needs of agriculture production, both livestock and crop. This lightweight, handheld, multi-function meter can be used inside and out for barn/facility environmental assessments, commodity storage, and field and spraying monitoring. Current and logged data can be transferred to a iOS/Android wirelessly with the LiNK wireless communication option and Kestrel LiNK app, or to a Windows/Mac with either an additional Kestrel LiNK Dongle or waterproof USB Data Transfer Cable accessory.



## Kestrel 5400AG Cattle Heat Stress Tracker

This environmental meter calculates THI in addition to HLI and AHLU (cattle-specific heat stress measurements which include solar radiation and wind speed.) This end to end solution offers micro-climate, yard specific, pen level spot check or accumulated heat load calculation capability in addition to accepted “pre-programmed” risk category identifications. When paired with the included vane mount, the Kestrel 5400AG is a complete weather station and capable of recording and logging environmental conditions and accessing data with LiNK wireless data connectivity.

Read more at [www.cattleheatstress.com](http://www.cattleheatstress.com)



**Implementing a measurement-based heat stress management plan is the most effective way to minimize heat stress losses without wasting money.**



**THI**

The Temperature-Humidity Index (THI) is an index combining the effects of temperature and relative humidity to assess environmental heat stress on cattle and other livestock.



**HLI**

The Heat Load Index (HLI) is a measure incorporating black globe temperature (solar radiation), relative humidity, and wind speed. It was developed as an indicator of the environmental heat load on cattle.



**AHLU**

Accumulated Heat Load Units (AHLU) is a measure of accumulated heat by an animal above its HLI Upper Limit Threshold.



**Delta T**

Delta T is the spread between the wet bulb temperature and the dry bulb temperature and is used to assess spraying conditions.



**Kestrel DROP D2AG  
Livestock Heat  
Stress Monitor**

**Kestrel 5000AG  
Livestock  
Environmental  
Meter with LiNK**

**Kestrel 5500AG  
Agriculture Weather  
Meter with LiNK**

**Kestrel 5400AG  
Cattle Heat  
Stress Tracker**

	Kestrel DROP D2AG Livestock Heat Stress Monitor	Kestrel 5000AG Livestock Environmental Meter with LiNK	Kestrel 5500AG Agriculture Weather Meter with LiNK	Kestrel 5400AG Cattle Heat Stress Tracker
		Kestrel 5000AG Livestock Environmental Meter	Kestrel 5500AG Agriculture Weather Meter	
🌡️ Temperature	✓	✓	✓	✓
💧 Relative Humidity	✓	✓	✓	✓
🌡️🌡️ Heat Stress Index	✓	✓	✓	✓
🌡️💧 Temperature-Humidity Index (THI)	✓	✓	✓	✓
🌡️💧 Dew Point Temperature	✓	✓	✓	✓
🌀 Wind Speed/Air Speed		✓	✓	✓
❄️ Wind Chill		✓	✓	✓
🌡️💧 Wet Bulb Temp (Psychrometric)		✓	✓	✓
👤 Station Pressure (Absolute Pressure)		✓	✓	✓
📏 Barometric Pressure		✓	✓	✓
⬆️ Altitude		✓	✓	✓
🏔️ Density Altitude		✓	✓	✓
📏➕ Volume Air Flow		✓	✓	
🕒 Direction			✓	✓
🌀 Crosswind			✓	✓
⬆️⬆️ Headwind/Tailwind			✓	✓
🌡️🌡️ Delta T			✓	✓
🌡️🌡️ Globe Temperature				✓
🌡️💧 Naturally Aspirated Wet Bulb Temp				✓
🌡️💧 Wet Blub Globe Temperature (WBGT)				✓
🌡️💧 Heat Load Index (HLI)				✓
🌡️💧 Accumulated Heat Load Units (AHLU)				✓