

Feedlot Weather Station

Feedlot Weather Station with Accumulated Heat Load Units

MEA's Feedlot Weather Station allows graziers and feedlot managers to assess the levels of heat stress in cattle related to sunshine and humidity balanced against the mitigating factor of wind speed.

The weather station captures the three main criteria for determining the Heat Load Index (HLI): black globe temperature, relative humidity and wind speed.

- **Black Globe Temperature**
- **Accumulated Heat Load Units**
- **Accurate, low maintenance**

In addition to HLI the provided software can calculate Accumulated Heat Load Units (AHLU) - the number of hours over a day or days when the HLI is above a threshold value. AHLU gives a better indication of high heat load than a spot measure of HLI because it combines intensity and duration of exposure to excessive heat load.

The weather station is of sturdy construction, features high quality instrumentation and has low maintenance requirements.

Communications options include direct connection to a computer and automated data retrieval using an Internet connection.

MEA's Magpie software (for Windows) is provided as part of the system, and is used to display data in a range of graph styles and as tables. Data can be exported to other programs if required.

Applications

Excessive heat load in feedlot cattle during the summer months can result in significant production losses and animal welfare considerations. MEA's Accumulated Heat Load Units tool allows feedlot managers to reliably assess the impact of radiant heat load, humidity and wind speed on the welfare and performance of cattle in their lot.



Specifications for Feedlot Weather Station

Measurement Range	Black Globe Temp: -9° to +54°C
	RH: 0 to 100%
	Wind Speed: 0.5 to 60 m/s
Accuracy	Black Globe Temp: ±0.2°
	RH: ±1%
Power Supply	Wind Speed: ±0.3 m/s
	10W solar panel

