

Sensors and Interfaces

Heron supply a range of sensors to integrate with our irrigation and environmental controllers. The sensors can help to optimise your growing conditions, improving efficiency and increasing yield.

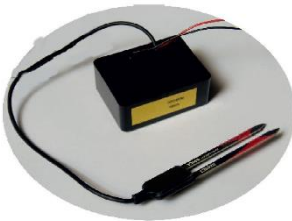
Internal Humidity Sensor



The Heron humidity sensor allows irrigation to be controlled on humidity. Applications include cooling, misting and fogging. The humidity sensor is a high-quality sensor for industrial environments.

- Multiple humidity sensors can be connected using the 8-way input board.
- Accuracy +/- 3%. With a Range of 0-100%RH.

Soil Moisture Sensors



Two types of moisture sensors can be connected to Heron controllers, the Heron moisture sensor and the Decagon moisture sensor. The Decagon moisture sensor works at a higher frequency and provides a scientific measure of volumetric water content. The moisture sensors can be used to either initiate or disable irrigation or used for monitoring.

Both types of moisture sensor can be connected to either the Mi or the Ti controller. When using the Ti controller, the moisture sensor comes with its own decoder and unique serial number. The Ti controller can have up to 20 moisture sensors connected to the 2-Wire cable. The Mi controller can have 1 moisture sensor connected as standard. Up to 4 moisture sensors can be connected to an Mi controller if the Input Board is used (see over leaf).



Light Sensor



The Heron light sensor allows irrigation to be controlled on light. Up to 8 different light energy level thresholds can be set to initiate your irrigation.

- Can also be used to initiate irrigation based on light power
- Supplied on a stainless-steel bracket for mast or wall mounting.
- Can be used to reduce EC levels when using a fertilizer dosing system.
- Light Power Range 4-2000 Watts/cm². Wave Length 420 - 675 nm.

Rain Gauge



The Heron rain gauge is tipping spoon type rain sensor.

- Rain fall thresholds can be set which will reduce irrigation by a specified percentage.
- The period over which the rain fall will affect the irrigation can be adjusted.
- Stainless steel bracket available for mast or wall mounting.
- Accurate to 1mm of rain fall.

Raining Sensor



The Heron raining sensor detects the immediate onset of rain fall. The raining sensor is usually used for environmental control but can be used to immediately disable irrigation.

- Gold-plated heated plate for a very quick response time and long-term reliability.
- The unit is fully encapsulated.
- Rain fall as low as 0.005mm will be detected.

Internal Temperature Sensors

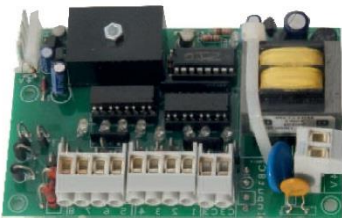


Heron produce an aspirated and non-aspirated temperature sensor for internal temperature measurement. Irrigation can be enabled or disabled once a certain temperature threshold has been reached.

- The non-aspirated sensor is suitable for applications where the temperature is not changing rapidly and the sensor can be mounted in the shade.
- The aspirated sensor provides more accurate measurement of air temperature particularly when the temperature is changing.
- The aspirated sensor includes a water-resistant fan and can also be fitted with a humidity sensor.
- Accuracy to 0.1 C with a Range of -10 C - + 50 C.

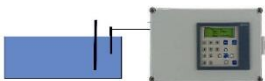
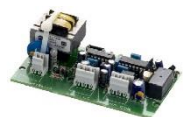
8-Way Input Board

The 8 way input board expands the number of switched inputs on your Heron irrigation controller.



- Up to 2 boards can be connected to a controller.
- The switched inputs are optically isolated, and the switches can be up to 200m from the controller.
- Each switched input can be programmed to perform one of the following functions:-
 - Send an email and log an event
 - Start an irrigation program
 - Stop an irrigation program
 - Freeze an irrigation program

Level Sensor Board



The level sensor board allows level sensing in a water tank using stainless steel rods.

- It provides a very accurate trip point and is ideal for small or shallow tanks.
- The board includes 2 sensor inputs for high and a low-level sensing. Hysteresis software on the output prevents the output changing too rapidly. The output will not change state until both the high and low sensor are in the same condition.
- Option to allow for tank filling or tank emptying applications.

Flow Sensor Board



Heron's flow sensor board allows additional flow meters to be connected to a Heron irrigation controller.

- Up to 4 boards can be connected to one Heron irrigation controller.
- Supports paddle wheel and pulse type flow meters.
- 20V supply available to power powered paddle wheel flow sensors.

For Hall Effect, non-powered paddle flow meters, the Heron Flow meter amplifier should also be used.