

Mobile Harvesting Data System Classic GrainGage™.

This harvesting data system is perfectly suited for measuring the weight, moisture and hectoliter weight, and for plot yield as of 900 g where best possible measuring accuracy is required, and when deploying the Field Research Software™ (FRS) for application of field plans, storing measured data, and exporting the resulting data.

The sequence is as follows during harvesting:

- The GrainGage™ comprises a 3 chamber system. The first chamber serves as a holding hopper with filling level sensor. Moisture and weight measurements are performed in the second and third chambers.
- Once the filling level sensor on the harvesting data system has sufficient material for weighing, the measurement starts automatically in the plot while the harvester is moving
 - At the end of the plot, the remaining material is then weighed
 - The individual sub-weights are added and the mean value of the acquired moisture data and the hectoliter weight are calculated
 - The data is stored on the PC, e.g. the Allegro™ Field PC, or an industrial PC
- Additionally, the data can be documented on a mobile field printer or stored on a memory card
- Manual acknowledgment closes the weighing cycle. You can then immediately harvest the next plot

Your benefits summed up:

- **Precision electronics:** The new HM800 electronic links weight and moisture sensors by means of a CAN bus data line. The core element in this new data recording system is the "HM800 Analog and Actuator Module", removing the need for long and clumsy wiring.
- **Slope and motion sensor:** Improves weighing precision and reduces errors caused by vibrations and the harvester moving. This enables weighing while the harvester is moving through the plot and measurements on slopes of up to 10%.
- **Moisture sensor:** Highly precise measurements are possible even for high levels of moisture (up to 35%). The mean values of the sub-samples taken for a plots are calculated, thus providing representative results
- **Continuous harvesting** of long plots is supported
- Use of **Field Research Software™ (FRS)**

Technical data

Weighing system	
Dimensions (B x T x H)	736 x 356 x 533 mm (29" x 14" x 21")
Weight	45 kg (99 lbs)
Capacity	3.00 liters - approx. 2.5 kg (5.5 lbs) wheat 1.50 liters - approx. 1.2 kg (2.7 lbs) wheat 0.75 liters - approx. 0.6 kg (1.3 lbs) wheat
Grain discharge opening	152.4 x 215.9 mm (6" x 8.5")
Grain inlet opening	114.3 x 190.5 mm (4.5" x 7.5")
Actuator	Precision pneumatics
Measuring precision	
Weight	+/- 0.4% Full Scale or +/-10g absolute per weighing
Hectoliter weight	+/- 0.68 kg/HL
Moisture	+/- 0.5% - 25% (wet weight basis - wwb), +/- 0.9% - 35%
Minimal quantity for moisture measurement	At least a full partial weighing, 3.00 / 1.50 / 0.75 liters
Speed	Approx. 4 sec. per partial weighing
HM 800 Electronic	
Protection class	Water and dust proof to IP67
Operating temperature	-20°C to +50°C
Power supply	9 - 17 V DC
Interface	CAN Bus – 4 wire
Connection	Con X all connectors

We reserve the right to make technical alterations.



Moisture sensor



Weighing cells