



**HarvestMaster**  
by Juniper Systems, Inc.

## Classic GrainGage



The Plot Harvest Data System™ with patented Classic GrainGage™ and HM800™ electronics provides on-combine data collection. The tradition of providing high accuracy and reliable data collection systems began with the Classic GrainGage.

### Applications

- Standard Variety Testing
- Low Plot Yields, Cereals
- Single Plot Combines
- GPS Strip Harvest

### Advantages

- Superior Measurement
- Increased Accuracy
- Unmatched Speed

### Overview

The Classic GrainGage is designed to collect moisture, test weight and plot weight data on cereals and small grains. It incorporates a holding hopper, a test weight chamber and a weight chamber sized according to plot yield. Multiple samples from a plot are processed through the chambers. Total plot weight is summed, while moisture and test weight are averaged. Data can be recorded on a variety of plot sizes and grain types.

### Precision Electronics

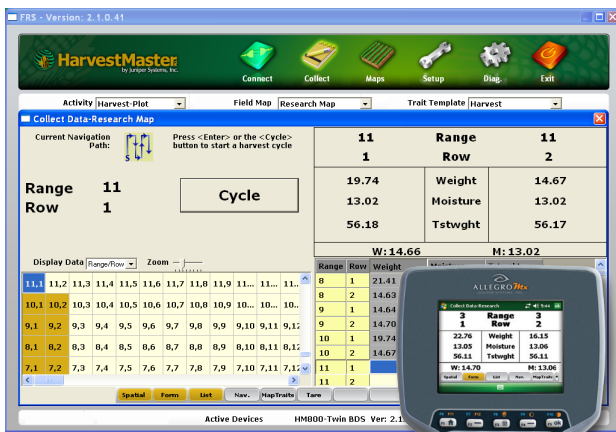
The HM800 electronics connect the HarvestMaster weight and moisture sensors through a CAN communications network. At the heart of this network are the HM800 Analog and Actuator modules. These modules are located in close proximity to the sensors that measure weight and moisture. This design increases data accuracy for these critical measurements and eliminates large bulky cables.

### Leading Edge Technology

The Classic GrainGage features two unmatched sensor technologies. The patented Slope and Motion Sensor™ increases weighing accuracy and reduces errors caused by combine vibration and movement. The GrainGage now features the EM Grain Moisture Sensor™. It provides accurate moisture and test weight measurements even on high moisture grains. Repeatability of measurements are superior to standard bucket designs.

### Field Research Software (FRS)

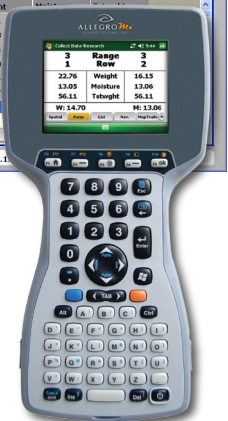
FRS manages the plot harvest data collection process. Bring field map identifiers from your analysis program into FRS using DataLink. During harvest, run FRS on a mobile handheld or laptop mounted in the combine to record grain moisture and weight for each plot according to the selected navigation pattern. Send harvest data back to the analysis program with DataLink.



FRS harvest screen on laptop PC



HM800 System Console



FRS harvest on Allegro MX

## Plot Harvest Data System

- HM800 Electronics: System Console, Actuator Module, Analog Module, and Printer
- Field Research Software
  - Allegro MX with FRS
  - Laptop or PC with FRS
- Classic GrainGage with HM800 modules

## Field Research Software

- Choose FRS for Windows Mobile®, Windows XP® or Windows Vista® operating system.
- Create or import field maps with identifiers
- Multiple navigation choices
- Easily monitor plot harvest data
- Automatic export to analysis programs



**Plot Harvest Data Systems**  
**Field Research Software**  
**Rugged Field Computers**  
**Mobile Agriculture GIS**

## Features

- Moisture measurement with EM Grain Sensor
- Three different size moisture chambers for low yield crops
- Precision HM800 CAN (Control Area Network) Electronic Modules
- FRS Harvest for Classic GrainGage available for Windows Mobile®, Windows XP® or Windows Vista® operating system
- Patented slope and motion compensation for weight measurements (U.S. Patents 5,487,702 and 6,313,414)
- Record GPS coordinates in strip harvest mode

## Benefits

- HM800 electronics with CAN eliminate bulky cables
- Highly accurate, repeatable moisture and test weight measurement
- Weight measurement compensated for combine movement
- Collect moisture and test weight on samples as small as 900 grams
- Harvest strip trials or normal length plots without stopping the combine

## TECHNICAL SPECIFICATIONS

### Classic GrainGage

Size:	29" wide x 14" deep x 21" high
Weight:	100 lbs (45 kg) shipping weight
Chamber Capacity:	3.0 Liter – Typ. 5.5 lbs (2.5 kg) corn 1.5 Liter – Typ. 2.5 lbs (1.1 kg) corn ¾ Liter – Typ. 1.4 lbs (0.64 kg) corn
Weight Accuracy *:	+/- 0.022 lbs (+/- 10 g)
Moisture Accuracy:	+/- 0.5% (wwb) up to 25%, +/- 0.9% up to 35%
Test Weight Accuracy:	+/- 1 lbs/bu (+/- 1.25 kg/hL) over 95% of samples
Grain Outlet:	6" x 8.5" opening
Grain Inlet:	4.5" x 7.5" opening
Actuators:	Precision pneumatic

### HM800 Electronics

Environmental:	IP67 - waterproof & dustproof
Operating Temperature:	-20 C to +50 C
Power:	9V to 17V DC
Communications:	CAN Bus - 4 wire
Connector:	Sealed Con-X All connectors

\* NOTE: Accuracy of the weighing system can be adversely affected due to excessive vibration and shock. To achieve specified weight accuracy on moving machines, the HarvestMaster patented Slope & Motion Sensor must be enabled. Dynamic forces on the system in any direction should not exceed a magnitude of 0.8 g and the slope of the weighing platform should not exceed 10 degrees.

**TEL** 435.753.1881  
**FAX** 435.753.1896  
**E-MAIL** info@harvestmaster.com  
**WEB** www.harvestmaster.com