

# Agricultural Weighing

## PRECISION FARMING MEASUREMENT

### ag cells and weight displays

Cardinal's AG Load Cell paired with the Cardinal 212 Series Indicator is an ideal combination for use in both mobile and fixed weighing applications on the farm. The AG Load Cells may be placed between the truck or trailer frame and the box to form a heavy-duty mobile scale or, place the load cells on a frame and use them to support pallets or platforms for other farm weighing requirements. Either way, you'll get the most for your weighing dollar.



### Applications:

- Seed Carts
- Feed Mixers (truck and trailer)
- Fertilizer Spreaders (truck and trailer)
- Pallet Scales
- Platform Scales
- Single Animal Scales



### Cardinal model 212 Weight Indicator

0.8 inch high LCD display

#### Model 212-1S

- 1 Load Cell Connector
- 1 Power / 1 Output

#### Model 212-4S

- 4 Load Cell Connectors
- 1 Power / 1 Output



### Cardinal model 212X Weight Indicator

2 inch high LCD display

#### Model 212X-1S

- 1 Load Cell Connector
- 1 Power / 1 Output

#### Model 212X-4S

- 4 Load Cell Connectors
- 1 Power / 1 Output



The 212 and 212X are equipped with sealed connectors allowing connection to load cells and optional relays, serial devices such as a printer, remote displays and networks.

(-4S model shown to the left)

- One or Four Load Cell Inputs
- No Junction Box Required
- Environmentally-Sealed Connectors



### Cardinal model RD3 Remote Display

2 inch high LCD display

(1) serial port configurable with auto-detection

**Powerful Potential for Farming Applications.**

**Indicator Includes Rear Shock Absorber Mounts.**

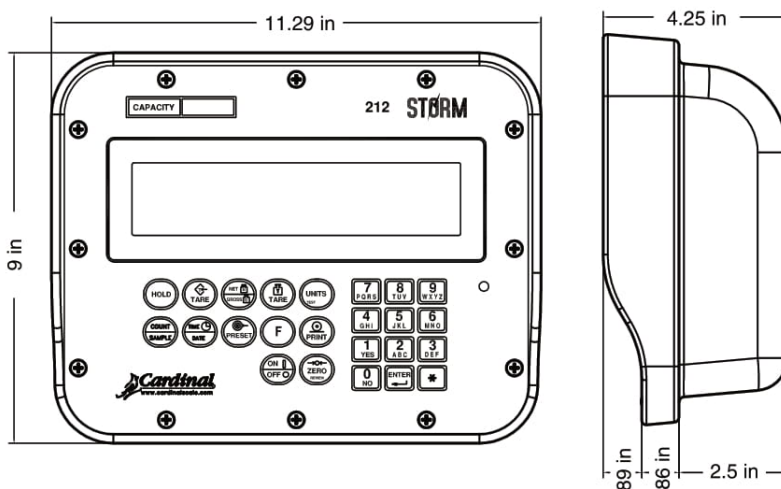
## 212 and 212X FEATURES:

- Polycarbonate Enclosure.
- Backlit Transflective Display.
- 100 ID Locations Includes Load Count and Net Weight.
- 10-16 VDC Power.
- Optional: 115/230 VAC 50/60 HZ.
- Digital Fill Control with Load or Unload Operation and Accumulation of ID, Load Count, and Net Weight.
- Local/Remote Operation.
- Remote Inputs for START, ZERO/CLEAR, PRINT, 2XX-KEYFOB.
- Non-Commercial Agricultural Weighing Capabilities.
- Retrofit to Feed and Seed Cart Operations for Monitoring Weights.

## DIGITAL CALIBRATION METHODS

1. Enter the quantity of Cardinal AG load cells.
2. Enter the quantity and mv/v output of other load cells.
3. Apply test weights according to traditional calibration methods.

\* Test weights not required for 1 and 2.





# 212X WEIGHT INDICATOR

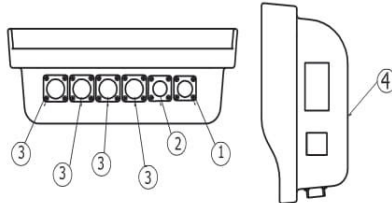
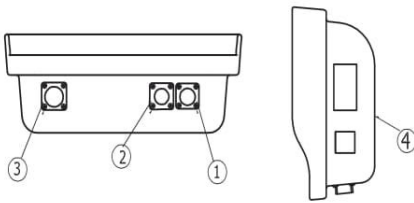
Cardinal Scale Manufacturing Co.

## 212X-1S

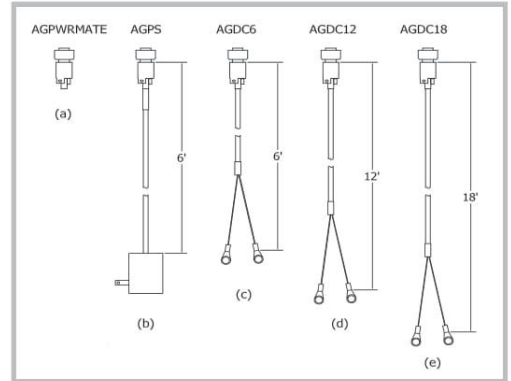
- 2" LCD Display
- 1x DC Power Conn.
- 1x I/O Conn.
- 1x Load Cell Conn.

## 212X-4S

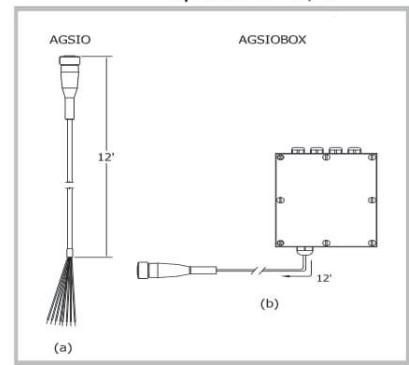
- 2" LCD Display
- 1x DC Power Conn.
- 1x I/O Conn.
- 4x Load Cell Conn.



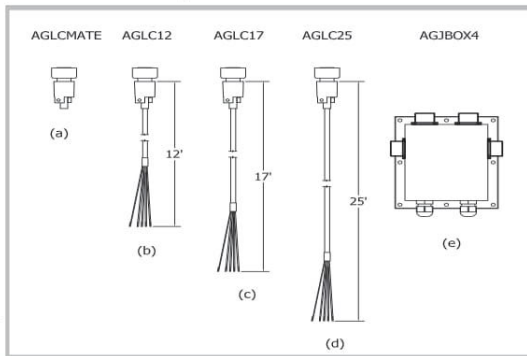
### Option 1 - Power



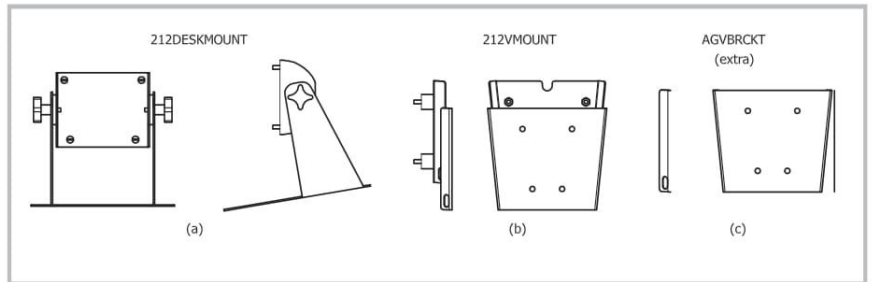
### Option 2 - I/O



### Option 3 - Load Cell



### Option 4 - Mounting



# Versatile Design Ideal for Both Static and Mobile Applications.



For static applications, the AG Cell design allows for easy adaptation to the structure that is to be the weighing platform.

## AG CELLS

- Polyurethane Sheathed Cables
- Potted Sealed Strain Gauges Protected by Steel Shroud
- Durable Alloy Steel Construction

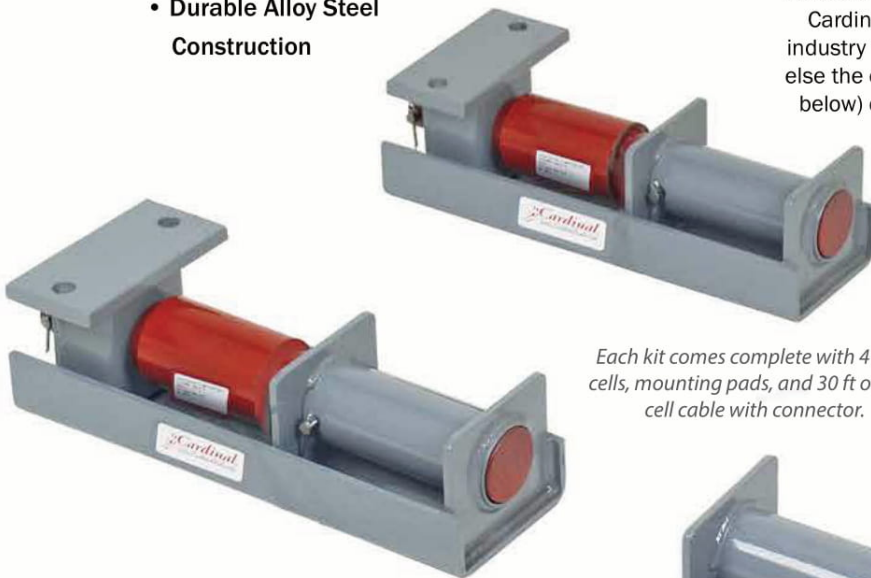


Model AG750

IP61

Available as a single cell (shown above) or in a set of four with stands.

Cardinal AG Load Cells are designed especially for the agricultural industry and are protected against rain, snow, dust, mud and anything else the environment can dish out. The four-point scale system (shown below) quickly installs beneath mixers, tanks, or other containers or structures mounted on a trailer or truck chassis.



Each kit comes complete with 4 load cells, mounting pads, and 30 ft of load cell cable with connector.



Model AG7.5K-4 AG cell weigh beam load cell kit shown here.

### AG CELL SPECIFICATIONS

**Insulation Resistance:** > 5,000 Megohms @ 50 VDC  
**Minimum Dead Load:** None  
**Zero Balance:** +/- 1%  
**Combined Error:** < 0.25% of Rated Capacity  
**Zero TC Counts:** +/- 25 ppm/C from -10° to +40° C (14° to 104° F)  
**Input Resistance:** 362 to 400 ohms  
**Output Resistance:** 344.75 to 355.25 ohms  
**Environmental Rating:** IP61, mechanical tube filled with flexible potting compound  
**Span TC:** +/- 10 ppm/C from -10° to +40° C (14° to 104° F)  
**Overload Rating:** Do not exceed capacity rating of load cell

**4-Load Cell Kits:** AG750-4: 3,000 lb system capacity AG7.5K-4: 30,000 lb system capacity AG18K-4: 72,000 lb system capacity

# AG Cell Series Weigh Beam Load Cells and Stand Assemblies

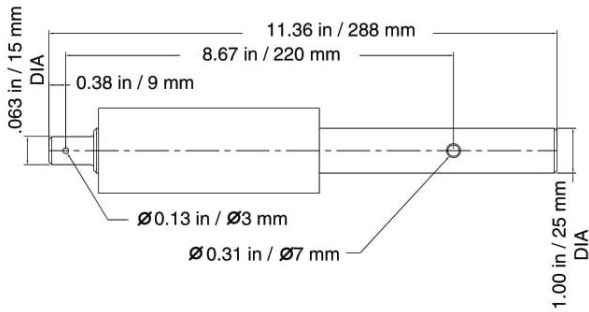
## AG750 LOAD CELL ONLY

**CAPACITY:** 750 lb

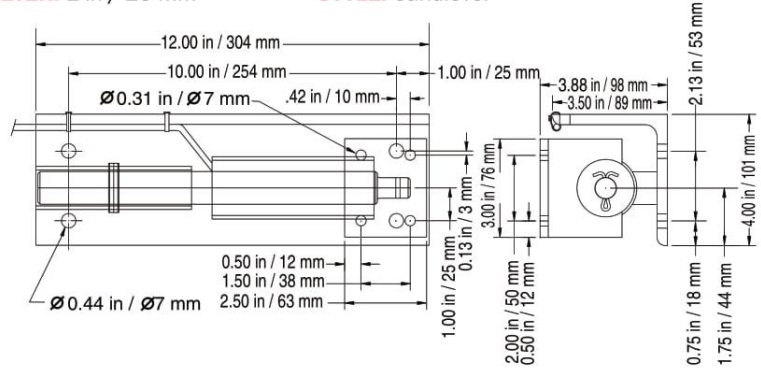
**OUTPUT MV/V:** 0.8

**DIAMETER:** 1 in / 25 mm

**STYLE:** Cantilever



## AG750-1 LOAD CELL WITH STAND



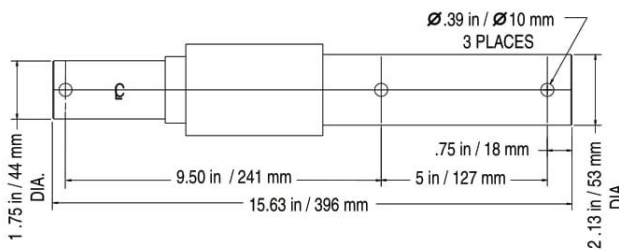
## AG7.5K LOAD CELL ONLY

**CAPACITY:** 7,500 lb

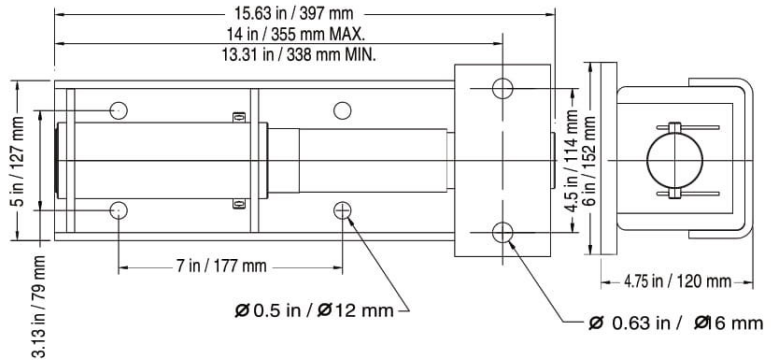
**OUTPUT MV/V:** 0.8

**DIAMETER:** 2.12 in / 53 mm

**STYLE:** Cantilever



## AG7.5K-1 LOAD CELL WITH STAND



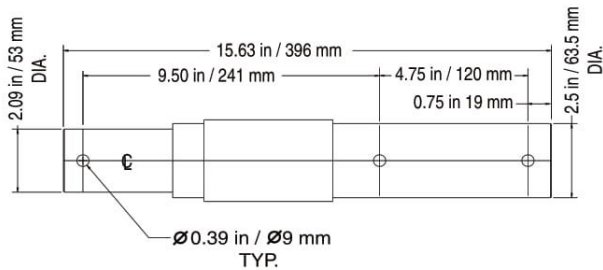
## AG18K LOAD CELL ONLY

**CAPACITY:** 18,000 lb

**OUTPUT MV/V:** 1.3

**DIAMETER:** 2.5 in / 63 mm

**STYLE:** Cantilever



## AG18K-1 LOAD CELL WITH STAND

