



## **ECONOMY LOW PROFILE CARBOY SCALE – ECS400**

### **1.0 GENERAL**

The scale shall be an Eagle Microsystems Model ECS400 Economy Low Profile Weigh Plate suitable for weighing a chemical container having a maximum total weight of 400 lbs. (or metric equivalent) and a maximum diameter of 20-inches.

### **1.2 START UP / OPERATION**

Installation shall be accomplished without the need for special tools or lifting devices. Start up, calibration and operation of the scale shall not require the services of the manufacturer. However, assistance shall be available from a factory trained, local representative, if required.

### **2.0 DESCRIPTION**

The scale shall be comprised of a floor mount low profile weighing base furnished complete with 15 ft (5m). interconnection cable, and a remote mount electronic indicator/transmitter.

### **2.1 COMPONENTS**

#### **2.1.1 SCALE BASE**

The weighing platform shall be suitable for weighing one (1) chemical storage container having a maximum weight as shown above. The scale load shall rest completely within the dimensions of the scale base. Scale platform shall measure 20-inches x 24-inches. Maximum height of scale base shall not exceed 1 5/8 in. (4.1 cm).

The base shall be constructed of corrosion-resistant solid PVC. Scales with steel deck and substructure, and epoxy finish shall not be acceptable.

The scale shall be of the hinged, single load cell design and shall be furnished with a stainless steel leveling foot that shall be adjustable from the top of the platform. The load cell, mounting hardware and leveling foot shall be of stainless steel. The precision load cell shall be protected from damage through the use of overload stops and shock isolators. Load cell

shall be temperature compensated 0 to 150° F (0 to 65° C). Systems incorporating hydraulic load cells shall not be acceptable.

All scale electronic components shall be enclosed in a NEMA 4X enclosure.

### 2.1.2 ELECTRONIC INDICATOR

The electronic indicator shall be a microprocessor-based, single channel digital device with a 6-digit LED display for maximum display resolution. The scale shall be calibrated for a maximum weight of 400 lbs (182 kg) with an electronic tare weight adjustment of 0 to 100 %. Display resolution shall be in 0.2, 0.5, or 1 lb. or equivalent metric values providing an accuracy of 0.1 % of rated capacity. LED characters shall be a minimum of 0.5-inch in height with a minimum of 7 segments. The electronic indicator shall provide a digital display of gross, tare, used, remaining and total weights. The indicator shall be housed in a UL-approved, NEMA 4X fiberglass enclosure capable of remote surface mounting to a distance of 1000 ft. (300 m). The instrument shall have a 4-20 mAdc signal into 500 ohms.

### 3.0 POWER SUPPLY

The scale shall operate from a 115/230Vac, 50/60 Hz, single phase power supply, switch selectable.

### 4.0 OUTPUTS

The electronic indicator shall provide an output of 4-20 mAdc into 500 ohms. The output shall be proportional to the chemical weight measured on each scale base utilized. A serial RS-232 output shall also be provided.

### 5.0 OPTIONS

#### 5.1 RS-485 Serial Output

The electronic indicator shall provide an RS485 serial output for each scale base utilized.

#### 5.2 Low weight alarm contacts

The electronic indicator shall provide a low weight alarm relay with contacts rated at 3 amp @ 250 Vac for each scale base utilized .

## 6.0 WARRANTY

The entire scale shall be covered by the manufacturers Standard Warranty, which shall include the entire assembly for 18 months from shipment or one (1) year from date of start up.

## 7.0 MANUFACTURER

The scale shall be manufactured by Eagle Microsystems, Inc., Pottstown, PA, USA phone: 610-323-2250 / fax: 610.323.0114.  
[www.eaglemicrosystems.com](http://www.eaglemicrosystems.com)