

The Value of Air-Weigh Air Suspension Scales

Background

Based in Eugene, Oregon, Air-Weigh is a privately-owned company that provides on-board electronic scales for numerous vehicle types in the transportation industry. Air-Weigh's current scale offerings include the 5800 Series of Truck Scales and the 5802 Series of Trailer Scales. Air-Weigh vehicle scales are installed on tractors, trailers and trucks worldwide.

The Air-Weigh scale is a true on-the-ground axle weight scale and is not affected by temperature, humidity or altitude. With an Air-Weigh scale, drivers can accurately determine on-the-ground axle weights right at the loading site. Air-Weigh Air-Suspension Scales measure changes in air-suspension pressure to 1/27th of one PSI, or in increments of about 20 to 40 pounds of on-the-ground weight.

Air-Weigh 5800 Series of Truck Scales

The 5800 Series on-board scale converts tractor and trailer suspension loads to an accurate on-the-ground weight. The scale displays steer and drive weights, and also trailer weights with either an optional air line to the trailer suspension or a 5802-Series Trailer Scale. The truck in-dash LCD display is mounted in a standard 2-inch hole and provides digital weights to within 300 lbs (140 kgs) of a DOT scale. Gross Vehicle Weight and Net Payload are also displayed, by toggling the display.

In addition to the features noted above, the standard kit also includes a weight alarm output, J1708 data communication capability, a printer option, optional spanish language displays, and more. Some fleets use the alarm feature of the Air-Weigh scale to determine when the vehicle weight is approaching desirable limits.

All of the electronics are installed in the cab. The kit includes Air-Weigh's in-dash display, a ComLink Electronic Control Unit (ECU), and the weight sensor/s.

Air-Weigh 5802 Series of Trailer Scales

The 5802 Series Trailer Scale converts trailer air-suspension pressure to an accurate on-the-ground weight. The scale will display the actual on-ground weight of each *axle group* in 20 pound increments to within 300 pounds (140 kgs.) An axle group is defined by the Height Control Valves (HCV), or leveling valves, on the suspension. For instance, a tandem trailer axle suspension typically has only one HCV, so the two axles are referred to as a single *axle group* or channel number. Additionally, any tractor equipped with a 5700/5800 Series scale in the cab will display the weight from the 5802 trailer scale while that trailer is connected via the 7-wire coil cord (J-560 connector).

Each trailer scale kit consists of the trailer scale module, an air suspension weight sensor, sensor cable, and power cable. One Trailer Kit is installed on each trailer suspension in order to process weight data for each of the weight-supporting suspensions in the vehicle.

As with the 5800 Series of Tractor Scales, the 5802 Series also includes Alarm feature whereby an overweight condition can activate a light or buzzer when the trailer is overloaded or the slider or load is positioned wrong.



Air-Weigh Product Highlights

- Accurate to within 300 lbs of a DOT certified scale
- Three year factory warranty
- Hands-off operation (after calibration)
- When connected to an Air-Weigh equipped trailer, the trailer weight automatically shows on the in-cab display and is included in GVW and Net Payload weights
- Dual-point calibration for optimal accuracy
- Not affected by altitude, temperature, or humidity

Air-Weigh Benefits

- Load it right the first time and head straight to the highway
- A tractor scale can help legalize axle weights even if a trailer scale is not equipped
- Available as a factory-installed option for tractors and trailers – available at over 80 trailer OEMs
- Maximize HOS time by eliminating scale trips
- Load to the legal limit every time and average more payload per trip
- Avoid expensive overweight fines

Value of Air-Weigh Scales

With Air-Weigh scales, drivers can see their axle weights right at the loading dock. They do not have to drive out-of-route to go to an in-ground scale to verify that their axle and load weights are legal. HOS time is spent driving or other important non-driving functions such as communicating with dispatch. It is estimated that the cost to a vehicle to visit an in-ground scale for weighing is as follows:

Scale Fee	\$ 8.00	Per weighing
Out of route driving	\$ 6.48	Based on an out of route of 6 miles at \$1.08/mile
Driver time	\$12.50	Based on 15 min of driver time at \$50.00 per hr.
Total	\$26.98	Per weighing

If the driver check-weighs each load and averages 2.2 loads per week, the total cost for check weighing is \$3,087 per year for each truck. An Air-Weigh tractor-trailer scale system will pay for itself in less than a year.

Many trucks, after loading, go to an in-ground scale. If overweight or underweight, the truck will return to the loading dock to load more or to remove some if the load. Drivers using the Air-Weigh scale eliminate going to the in-ground scale for check weighing, and also the need to return to the loading dock after weighing. Air-Weigh scales allow drivers to load their trucks with optimal efficiency and make more money on every load.

Load Smart with Air-Weigh Scales.