

Weigh Module Selection Guide



RICE LAKE WEIGHING SYSTEMS

Commitment Beyond Measurement®

www.rlws.com



Selecting Weigh Modules

How to be Confident You're Installing The Best

Low-quality, poorly-constructed weigh modules most often result in expensive repairs and replacements, costly downtime, and dissatisfied customers. So how do you avoid this? And, more importantly, what should you look for in a weighing assembly?

Selecting a high-quality weigh module involves factors such as working environment and loading conditions. Based on these and other design specifications, Rice Lake Weighing Systems' experienced engineering and design staff created the most comprehensive line of weigh modules available. Most companies concentrate on one or two types of mounts. We offer over 20 different mount styles, including the industry's only waterproof-guaranteed weigh modules. Manufactured to the highest quality standards, our mounts come complete with mounting kits and are backed by unbeatable service.



Quality Manufacturing

Rice Lake Weighing Systems' state-of-the-art 240,000 square foot manufacturing facility includes several machining centers, allowing us to offer the highest quality at competitive

prices. Our mounting assemblies are available with the best load cells in the world, including Rice Lake, Vishay Celtron, Vishay BLH, HBM, Flintec, Interface, Vishay RTI, Vishay Sensortronics, and Vishay TedeA-Huntleigh.

ISO 9001 registered, we consistently provide the highest quality in the industry. Our quality assurance program includes comprehensive documentation and control processes. These guidelines evaluate how products are manufactured, warehoused, sold, and shipped to customers. The result is consistent product quality.

Complete Mounting Kits

Complete mounting kits are available with our weigh modules, simplifying the selection and installation processes. Each kit comes with a detailed installation manual, and an analog or digital junction box with cable assembly, eliminating the need to order separate parts. These efficient mounting kits include everything needed to easily set up the weigh module.



Choosing the Correct Weigh Module

The wide variety of weigh modules we manufacture and distribute may leave you wondering what the differences are between certain models and, most importantly, which modules are best suited for your applications. This document summarizes the design of our weigh modules and explains the best applications for each.

washdown/hostile environment

RL9000 TWM Tank Module

The low-profile RL9000 TWM maximizes space and its all-in-one construction minimizes installation time. This module will accurately weigh even if the base is off level by as much as 3 degrees. The 100% uplift protection and self-checking design provide extreme durability and the RL9000 TWM comes standard with welded seal but is available with hermetic seal.



Specifications

1000-450,000 lb
Stainless Steel



RL8000HE Tank Module

Featuring complete stainless steel construction, the RL8000HE provides long-term reliability in washdown and corrosive environments. Field replaceable cable reduces downtime in the event the cable is damaged and features 300% overload capabilities.



250-5000 lb
Stainless Steel

SURVIVOR 1700HE Weigh Module Kit

The SURVIVOR 1700HE features a precision-machined, weldless design for maximum pressure washdown effectiveness. Integral jacking bolts simplify installation and hermetically-sealed load cells provide consistently accurate weighments. The bolt-in-place, self-checking design isolates the load cells from side loads, overloads, and underloads.



11-11,000 lb
Stainless Steel



Paramounts Weigh Module System

The Paramounts system offers superior accuracy in applications with extreme expansion, contraction and vibration. With the addition of one to six free-sliding modules, the Paramounts system offers the free motion to eliminate side loads and the strength to keep the vessel intact. This system includes integral jacking/shipping bolts to prevent accidental lift-off, quick removal of load cells and hermetically sealed load cells.



225-22,500 lb
Stainless Steel



SURVIVOR 1855HE Weigh Module Kit

All stainless steel construction and stainless steel, welded seal load cells make this module ideal for washdown applications. Internal height adjustment simplifies installation. A Teflon[®]-jacketed cable and integral conduit adapter heighten chemical and moisture resistance. With standard NTEP-certified 1:5000 division class III load cells, the 1855HE provides up to 0.02% total error.



1000-10,000 lb
Stainless Steel



SURVIVOR 2100HE Weigh Module Kit

With an articulating load plate, hardened load pin, and double-ended beam load cell in one simple design, these modules tolerate eccentric and side loads of up to 100% of capacity. NTEP-certified, 1:5000 division class III load cells yield up to 0.02% total error. Teflon[®]-jacketed cable provides superior chemical resistance and a conduit adapter offers washdown protection.



20,000-100,000 lb
Stainless Steel



conveyor/in-motion

RL1800 Tank Module

Combining self-checking and multidirectional movement capabilities, the RL1800 tolerates platform and tank movement in all directions. The center-pivoted, tension loading design incorporates spherical washers for self-centering. The load is suspended on a high-strength bolt instead of the traditional wire rope, providing added durability.



250-10,000 lb
Alloy and Stainless Steel



RL50210TA Mini Tank and Conveyor Module

The RL50210TA is cost-effective for indoor applications where checking requirements are low and vibration and shock are moderate. This popular design utilizes neoprene isolation/compression mounts, allowing for minor misalignment, thermal expansion and contraction, and shock absorption.



50-2500 lb
Alloy and Stainless Steel



Teflon is a registered trademark of El Dupont.

NTEP certified 1000-2500 lb capacities only

mid- to heavy-capacity

RL2200 Tank Module

Self-centering in all directions, the RL2200 allows for excessive side and eccentric loads without sacrificing performance. The low profile, easy-to-install design provides simple solutions for a wide variety of applications. Self-checking, this rugged, high-precision mount eliminates the need for check rods.



Specifications

2500-50,000 lb
Alloy and Stainless Steel

RL1600 Tank Module

The RL1600's low-profile, bolt-in-place design allows the module to be bolted directly to the tank without requiring additional mounting plates or load buttons. Self-checking movement allows for thermal expansion and contraction and provides lift-off protection.



1000-25,000 lb (Cast Iron)
1000-75,000 lb
Alloy and Stainless Steel

EZ Mount 1 Tank Module

Utilizing a unique self-checking sliding pin design, the EZ Mount allows for thermal expansion and contraction, and controlled scale deck movement with minimal friction. Ideal for applications that require intrinsically safe or explosion proof areas.



5000-250,000 lb
Mild and Stainless Steel



Vishay Sensortronics 65092 Tank/Bin/Silo Module

Featuring a free-floating top mounting plate, the 65092 offers checking provisions for thermal expansion and contraction. This simple, low-profile assembly mounts directly to the foundation or structural support. A symmetrical mounting bolt allows for easy installation and maintenance.



50,000-200,000 lb
Alloy Steel

TSA Truck/Livestock Module

Constructed of cast steel and iron with primer coating, the TSA provides exceptional durability in rugged environments. The "Uni-link" suspension design checks lateral movement of the assembly, while allowing controlled floating of the scale deck. Self-checking, the TSA eliminates the need for check rods, expansion assemblies and other peripheral hardware.



10,000-75,000 lb
Cast Steel and Iron with
Primer Coating

MVS Truck/Track/Horizontal Tank Module

Built to withstand the punishment of the most severe environments, the MVS utilizes the center-loaded double-ended shear beam design. The mount is self-centering, which eliminates the need of costly check rods. This results in a pendulum suspension effect that eliminates binding, protects the load cells from damaging side load shocks, and automatically returns the mount to dead center. The mount is easy to install and promises high performance and long life.



10,000-125,000 lb
Mild Steel

isolated tension assembly (ITCM)

ITCM Tank/Hopper Module

Featuring a clevis and rod end ball joint assembly, the ITCM mount is half of the overall length of traditional S-Beam tension mounts. The unique design consistently corrects loading alignment, even in difficult applications. The load cell is completely isolated from stray currents and a grounding strap provides an alternative path to ground.



100-20,000 lb
Alloy and Stainless Steel



LOAD CELL GUIDE

The World's Leading Resource for Load Cell Technology



Rice Lake Weighing Systems' Load Cell Guide is the largest comprehensive guide for strain gauge technology. It is an excellent technical resource for load cells, weigh modules, and sensors. Complete with dimensional drawings, technical specifications, wiring codes, and load ratings, our Load Cell Guide is one of the most utilized resources in the weighing industry.

Call and request your load cell guide at 800-472-6703 and ask for our literature coordinator.

Custom Load Cell and Mount Specialists

While Rice Lake Weighing Systems offers the most comprehensive selection of load cells, mounts and sensors available, we understand that you may have unique requirements for custom-built products. If you don't see what you need in our catalog, call us to take advantage of the many special services Rice Lake Weighing Systems has to offer:

- Customized load cells and mounts
- Special coatings – SURVIVOR® coating for use in hazardous chemical environments
- Customized cable lengths
- Special cable – Teflon® load cell cable for high temperature environments



Integrated Diagnostic Solutions

iQUBE is the intelligent alternative to analog resistance trim junction boxes. Unlike conventional load cell summing devices, iQUBE provides simplified calibration, diagnostics, and enhanced electrical overload protection. iQUBE increases the performance of any existing multi-cell system and complements new scale installations. Through Rice Lake's exclusive Cell-Emulator™ feature, iQUBE compensates for an improperly functioning load cell to ensure that the scale maintains accurate operation.

Featuring the latest analog to digital technology and a non-proprietary interface, iQUBE works with conventional weight indicators, serial operator interfaces and PLC's.

Offering advanced diagnostic features that alert both operators and technicians to potential scale inaccuracies, iQUBE validates scale performance and greatly reduces scale downtime providing valuable troubleshooting data to speed repair.

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Commitment

SERVICE • SELECTION • SPEED

At Rice Lake Weighing Systems, we offer more than just innovative products and solutions—we offer an entire organization of proven leaders in the weighing industry ready to work for you. From engineering and production to sales, service and shipping, our team of dedicated professionals is driven to exceed your expectations. It's what we call "commitment beyond measurement."

- Comprehensive customer service is our top priority
- Innovative products and solutions specifically designed to easily integrate into your existing platforms
- The largest on-hand inventory for same day shipping
- The largest network of dealer partners worldwide
- Quick and cost-effective response to custom projects
- Exceptional industry training and on-demand technical support

Visit www.rlws.com

to view or download complete specifications for these and other weighing products.

Your Rice Lake Weighing Systems Distributor is:

RICE LAKE WEIGHING SYSTEMS®

Commitment Beyond Measurement®

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