



Overhead Weighing Product Guide





Measurement Systems International (MSI) crane scale products have been popular for decades in industries from aerospace to iron and steel, and are available through Rice Lake Weighing Systems. MSI's comprehensive line of design-engineered products such as crane scales, tension dynamometers, aircraft load

monitoring instrumentation, RF wireless data acquisition and signal processing systems are sold throughout the world by a qualified, factory-trained distribution network.

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Table of Contents

CRANE SCALES	MSI-3460 Challenger 3	4
	MSI-4260 Port-A-Weigh Industrial	5
	MSI-4260 IS Port-A-Weigh Intrinsically Safe	5
	MSI-4260M Port-A-Weigh Industrial	5
	MSI-4260M Port-A-Weigh Marine	5
	MSI-6360 Trans-Weigh	7
	MSI-9600HT Hi-Torque Port-A-Weigh Plus	7
DYNAMOMETERS	MSI-7300 Dyna-Link 2	9
	MSI Dyna-Clamp Clamp-on Tension Meter	9
INDICATORS AND REMOTE DISPLAYS	MSI-8000 RF Remote Display	10
	MSI-8000HD RF Indicator/RF Remote Display	11
	MSI-8004HD Indicator/RF LED Remote Display	11
	1280 Enterprise™ Series Indicator	12
	SCT-2200 Advanced Series Signal Conditioning Weight Transmitter	13
	Scoreboards and Remote Displays	13
WIRELESS NETWORK SOLUTIONS	TranSend™ and 7000HD Wireless Load Cell Interfaces	14
INTEGRATED SOLUTIONS	Clevis Load Pin Sensors	17
	Shear Web Load Cell	17
	MSI Clamp-on Load Cell	17
	MSI Tension Link	18



Crane Scales



MSI-3460 CHALLENGER 3

The MSI-3460 Challenger 3 with ScaleCore measurement module provides the industry-leading weighing features of previous Challenger designs, plus much more. Long-range viewing is enhanced with a large 1.5-inch (38 millimeter) ultra-bright LED display and resolution settings of up to 10,000 divisions for precise 0.1% loading accuracy. Product operating time is extended to over 80 hours with a single six-volt rechargeable battery. The Challenger packaging has been upgraded to NEMA Type 4/IP65 protection. Manufactured in the USA in strict compliance with the highest safety standards, Challenger continues to sustain a minimum of 200% Safe and 500% Ultimate Safety Factors.

MSI-4260 PORT-A-WEIGH



INDUSTRIAL

ScaleCore technology brings the next-generation MSI-4260 Port-A-Weigh to a new level of weighing class. The MSI-4260 meets or exceeds all industrial safety requirements, including OSHA, ANSI and ASME, and is an economical choice for many bridge crane, foundry and in-processes material handling needs. Common applications include shipping and receiving, bulk material processing and more.

MSI-4260 IS PORT-A-WEIGH



INTRINSICALLY SAFE

For medium- to heavy-capacity and duty-cycle needs, the MSI-4260 IS intrinsically safe crane scale meets or exceeds all industrial safety requirements, including OSHA, ANSI and ASME. This crane scale has a five-digit LED display with programmable brightness control for visibility in every lighting condition. The enclosure is made of a NEMA Type 4, IP66 marine grade 356 alloy anodized aluminum.

MSI-4260M PORT-A-WEIGH



INDUSTRIAL

For medium- to heavy-capacity needs, the MSI-4260M industrial crane scale has an established reputation as the industry standard in overhead weighing. It is built to perform reliably and offers two standard battery options: six D-Cell batteries or a 12V sealed lead acid (SLA) battery. Timed auto-off and auto-sleep modes conserve power when the unit is not in use, so it is always ready for the next job.

MSI-4260M PORT-A-WEIGH



MARINE

The MSI-4260M Port-A-Weigh marine crane scale is the most robust solution on the market for marine weighing. Able to capture weight with $\pm 0.1\%$ accuracy, the NTEP certified MSI-4260M features a 500% Ultimate Safety Factor to minimize the risk of accidents from overloading. A NEMA Type 4, IP66/67 aluminum enclosure stands up to moisture in marine and washdown environments. Sensitive electronic components, including the MSI-4260M's LCD display, are well-protected.



MSI-6360 TRANS-WEIGH



The MSI-6360 Trans-Weigh crane scale is an NTEP certified industrial crane scale specifically designed to withstand high-temperature applications. With ScaleCore technology, the MSI-6360 can be remotely controlled and monitored safely from virtually anywhere. Two integrated antennas allow the operator to connect up to two remote devices or networks via the optional RF or Wi-Fi modules. Connected ScaleCore remote devices can wirelessly display weight information—improving operation versatility and overall efficiency.

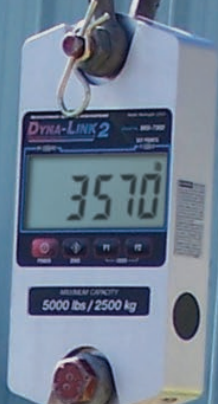
MSI-9600HT HI-TORQUE PORT-A-WEIGH PLUS



The MSI-9600HT Hi-Torque Port-A-Weigh Plus crane scale, integrated with ScaleCore technology, is available with capacities up to 200,000 pounds and captures weight with $\pm 0.2\%$ accuracy. A fixed hook is featured for interface compatibility with crane hooks equipped with powered rotation and where high torque conditions exist between the crane hook and load. The enclosure, made with IP66 marine-grade alloy anodized aluminum, features a rear-battery casting with snap-closure—keeping everything weathertight. Meeting or exceeding all industrial safety requirements, the MSI-9600HT features a 200% Safe and 500% Ultimate Safety Factor, minimizing overloading accidents.



Dynamometer



MSI-7300 DYNA-LINK 2



*Shown with optional
Rugged Remote*

Constructed of high-quality aircraft-grade aluminum, the battery-powered MSI Dyna-Link 2 is light and portable with NEMA Type 4/IP65-rated environmental protection. When integrated with ScaleCore technology, the Dyna-Link 2 offers advanced measurement capabilities in capacities ranging from 0.5 to 250 tons. MSI's Dyna-Link 2 meets or exceeds all safety design standards in the industry, with an Ultimate Safety Factor of up to 7:1. The rugged, lightweight Dyna-Link 2 is commonly used for load tests, rigging, crane and elevator certification as well as in the utility industry.

MSI DYNA-CLAMP CLAMP-ON TENSION METER

The MSI Dyna-Clamp clamp-on tension meter is safe and easy to use, with a built-in site window that ensures accurate placement. Unlike other tension meters, the Dyna-Clamp doesn't require as much manual force to engage the wire rope being tested. An easy-turn power screw makes measuring wire rope tension simple, even in difficult environments. The Dyna-Clamp has a large, sunlight-viewable LCD display and accommodations for a safety strap.





Indicator/Remote Displays



MSI-8000 RF REMOTE DISPLAY

The MSI-8000 is a full-featured, wireless, handheld remote display for operation with the MSI-3460 and MSI-4260 crane scales as well as the MSI-7300 dynamometer. Compact and portable, the MSI-8000's NEMA Type 4/IP65 industrial-grade enclosure makes it ideal for use in nearly any operating environment. The MSI-8000 operates on a license-free 2.4 GHz frequency with a typical application range exceeding 100 feet (30.48 meters), keeping the operator's safety and convenience at the forefront.

MSI-8000HD RF INDICATOR/RF REMOTE DISPLAY



The MSI-8000HD is the heavy-duty version of the reputable MSI-8000 RF handheld remote display. The milled anodized aluminum, IP68-rated enclosure is mountable in either a direct panel mount or optional tilt stand. Fully ergonomic with user-definable function keys and a bold six-digit one-inch display, operators will find the MSI-8000HD easy to use and read. Fully compatible with all MSI ScaleCore-based crane scales and dynamometers, the MSI-8000HD provides the utmost versatility for any application.

MSI-8004HD INDICATOR/RF LED REMOTE DISPLAY



The MSI-8004HD has all of the heavy-duty versatility of the MSI-8000HD with the added benefit of extremely high visibility in indoor and outdoor applications. The MSI-8004HD features 1.5-inch-high characters on its LED display. The display is available in either red, orange or green, allowing the controller to be clearly visible in many environments. The display can be configured to change color based on weight and setpoint conditions, making the MSI-8004HD a natural fit for safety-critical industrial applications.



1280 ENTERPRISE™ SERIES INDICATOR

The 1280 Enterprise Series programmable indicator delivers uncompromising speed for today's operations and expansive options for tomorrow's requirements. A durable color touchscreen with a seven-inch or 12-inch LCD display integrates data with real-time analysis, enabling operators to optimize operations and leverage actionable information. Crisp visuals bring instant access to frequently used functions. Program multiple screens with custom graphics and softkeys for an interface that is designed for your process.



SCT-2200 ADVANCED SERIES SIGNAL CONDITIONING WEIGHT TRANSMITTER

The SCT-2200 is DIN-rail mountable within a cabinet or control panel, where it converts a load cell signal to analog output, serial output or a specific fieldbus protocol. Unlike many other signal transmitters, the SCT-2200 has its own 0.3-inch weight display, with annunciators for unit and weighing status, and pushbuttons for zero, tare and setpoint entry.

SCOREBOARDS AND REMOTE DISPLAYS

MSI scoreboards are an accessory of the ScaleCore and CellScale wireless weighing systems that provide remote indication of weight information. These wireless RF displays feature high-intensity red or green LED characters. Rice Lake's LaserLight2 remote display features super-bright LED display with non-glare lens to provide sharp seven-segment, six-digit characters that are easy to read. Mounting options include a flange tab which accommodates ¼-inch hardware for vertical surface or pole mounting, or VESA mounting bracket for increased versatility.



Écran à distance LaserLight 2



Wireless Network
Solutions



TRANSEND™ AND 7000HD WIRELESS LOAD CELL INTERFACES

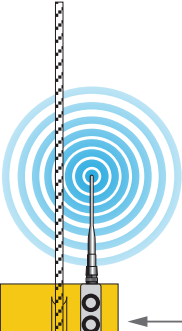
The TranSend family of wireless load cell interface transmitters and receivers are efficient communication devices that replace the need for traditional conduit. Compatible with a broad range of transmitting and receiving devices, TranSend is designed to work with ScaleCore-based products and its transmitters can interface with virtually any strain-gauged sensor. TranSend is available in single and multiple channel models with a variety of outputs including mV, analog and serial. TranSend exceeds communication application expectations with an operating distance of up to 300 feet line-of-sight.

CRANE

MSI-7000HD or MSI-7001HD

Mounted in-block

**Local power required*



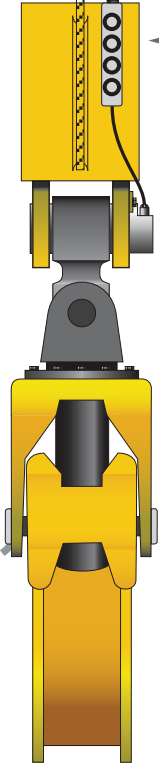
CRANE CAB

MSI-8004HD

Digital Indicator

Mounted in Cab

*10-36 VDC or 115-230 VAC
power supply*



SIDE VIEW

REMOTE PC INTERFACE

ScaleCore Webservice

**Customer Supplied Computer, Phone or Tablet*





Integrated Solutions

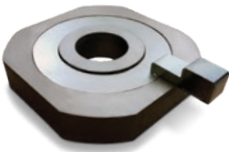


CLEVIS LOAD PIN SENSORS



The Clevis Load Pin Sensor is a crucial component for MSI's integrated overhead weighing solutions. Each MSI load pin is strictly industrial-grade, designed and manufactured specifically for each application. MSI load pins are designed with only internally mounted strain gauges for ultimate protection. To ensure the highest level of accuracy, performance and quality, each load pin is internally balanced and temperature compensated.

SHEAR WEB LOAD CELL



The Shear Web Load Cell is an integrated, low-profile load cell that prevents headroom loss without sacrificing accuracy. With extensive crane hook-block integration possibilities, the load cell can be custom fit for use with existing equipment. To transmit load data, the load cell can be interfaced with a wireless RF transmitter to communicate with a digital weight indicator or handheld remote display. Reliable and durable, the Shear Web Load Cell is IP67-rated, zinc-plated and constructed with 4340 alloy steel.

MSI CLAMP-ON LOAD CELL



The MSI Clamp-on Load Cell is a durable solution for measuring wire rope tension, providing dependable overload detection and prevention for overhead cranes and hoists. Available in two envelopes for accommodating most common wire ropes, 3/8-1/2-inch and 9/16-3/4-inch, the MSI Clamp-on installs quickly and easily to the wire rope dead end. The integral signal cable can be connected to various detection devices, such as the MSI-8004HD LED indicator or an advanced SCT weight transmitter. Weight-based setpoints can communicate with crane electronics, providing operator alerts and safety shut-offs based on unsafe load conditions.



MSI TENSION LINK

The MSI Tension Link was designed for permanent installations and features a mil-spec connector and analog communications sensor to interface with weight transmitters and readout instrumentation, including the MSI-8004HD indicator, SCT weight transmitters or TranSend® wireless load cell interface. For current crane operators, the MSI Tension Link can be installed in lift chains or between the lifting apparatus and crane block to measure weight and provide a safety indicator for overload and other conditions. The MSI Tension Link features a 7:1 safety factor for compliance with industrial and military safety requirements.





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