

 **Cardinal**<sup>®</sup>



**ARMOR**<sup>®</sup>  
TRUCK SCALES  
**PORTABLE**  
**SMARTCELL**<sup>®</sup>  
DIGITAL LOAD CELLS



- *Portable for Moving Job Sites*
- *IP69K-Rated Waterproof Digital SmartCell<sup>®</sup> Load Cells*
- *Modular Design for Platform Sizing Adjustments*



# EXPANDABLE BULKHEADS ALLOW YOU TO VARY SIZES DEPENDING ON WEIGHING NEEDS

- Capacities up to 135 tons
- Heavyweight 50-ton CLC standard
- 75,000-lb digital, stainless steel SmartCell® load cells
- 5/16 in / 0.8 cm thick checkered steel deck
- Long-lasting, anti-corrosion, durable baked tan powder paint
- Easy plug-and-play load cell connectivity (no junction boxes)
- Top-side access to all electronic components
- Pre-assembled deck modules for easy installation, expansion, and relocation
- Variety of platform sizes and capacities available
- Optional guide rails, bolt-on wings, and ramps
- NTEP and Measurement Canada certified

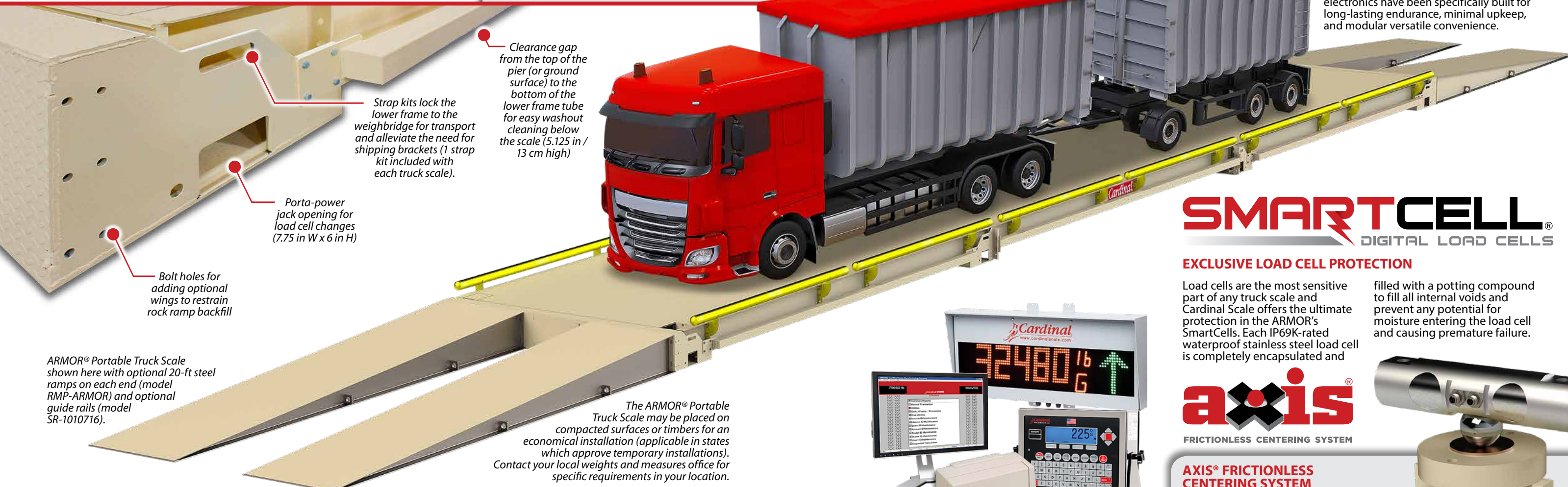


Cardinal's 225D Navigator weight indicator provides truck ID numbers and truck tares, plus diagnostic readouts onscreen for individual digital load cells.

# UNDISPUTED HEAVYWEIGHT CHAMPION

## DIGITAL TRUCK SCALES OFFERING UNMATCHED PERFORMANCE BUILT TO LAST A LIFETIME

Cardinal Scale's ARMOR® series digital truck scales with SmartCell® load cells offer unmatched performance built to last a lifetime of heavy-duty weighing use. Every facet of the scale weighbridge and electronics have been specifically built for long-lasting endurance, minimal upkeep, and modular versatile convenience.



Strap kits lock the lower frame to the weighbridge for transport and alleviate the need for shipping brackets (1 strap kit included with each truck scale).

Clearance gap from the top of the pier (or ground surface) to the bottom of the lower frame tube for easy washout cleaning below the scale (5.125 in / 13 cm high)

Porta-power jack opening for load cell changes (7.75 in W x 6 in H)

Bolt holes for adding optional wings to restrain rock ramp backfill

ARMOR® Portable Truck Scale shown here with optional 20-ft steel ramps on each end (model RMP-ARMOR) and optional guide rails (model SR-1010716).

The ARMOR® Portable Truck Scale may be placed on compacted surfaces or timbers for an economical installation (applicable in states which approve temporary installations). Contact your local weights and measures office for specific requirements in your location.

Cardinal Scale's ARMOR® Portable Truck Scales feature an extremely low 18-inch profile, and the versatile design allows for easy set-up for changing environments. The scale may be set on compacted ground surfaces or concrete piers.

Cardinal's versatile weighbridge design is modular with expandable bulkheads, so you may vary sizes as your weighing needs change. The floating center module makes it easy to add or remove sections to fit application requirements.

The clearance gap below the lower frame allows for easy washout cleaning. Set up is fast and easy, because there are no junction boxes used in the scale and the digital load cells plug and play with each other and provide digital diagnostics for each individual load cell at the indicator.

## SMARTCELL® DIGITAL LOAD CELLS

### EXCLUSIVE LOAD CELL PROTECTION

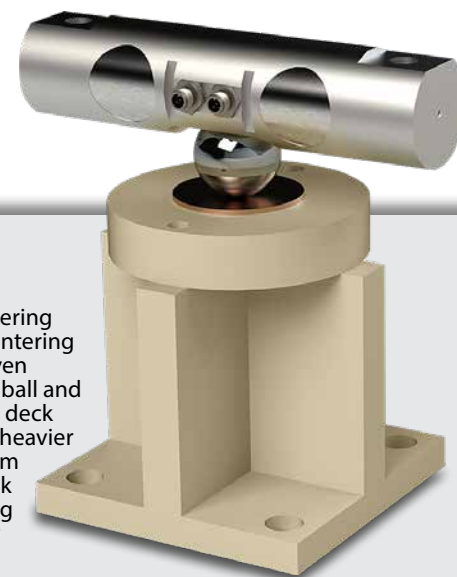
Load cells are the most sensitive part of any truck scale and Cardinal Scale offers the ultimate protection in the ARMOR's SmartCells. Each IP69K-rated waterproof stainless steel load cell is completely encapsulated and

filled with a potting compound to fill all internal voids and prevent any potential for moisture entering the load cell and causing premature failure.

## axis® FRICTIONLESS CENTERING SYSTEM

### AXIS® FRICTIONLESS CENTERING SYSTEM

Cardinal Scale's axis® frictionless centering system is the new frontier for load-centering technology and provides gravity-driven dynamic centering. The axis' durable ball and cup system utilizes gravity to restrain deck movement and vibration; in fact, the heavier the load is, the better. The axis® system will absorb movements from the truck moving on the weighbridge and bring the weighbridge to rest more quickly and smoothly.



### TRUCK SCALE ACCESSORIES

Cardinal Scale also offers weight indicators, ticket printers, remote displays, and vehicle weight management software to complete your vehicle scale weighing operation.



# VERSATILE DESIGN

## FOR HIGH-VOLUME TRUCK WEIGHT MANAGEMENT

Cardinal Scale's ARMOR® Portable series digital vehicle scales are the ideal answer when a scale is needed that can be moved from site to site. Industries such as rock quarries, sand and gravel pits, and logging companies must relocate equipment from time to time to maintain efficient product flow. Cardinal's ARMOR® Portable with SmartCell® digital load cells contributes to the ease and efficiency of these moves.

Designed for easy transport, each completely self-contained ARMOR® scale consists of modules fabricated to minimize overall height and maximize strength. Heavy-duty structural I-beams are placed in strategic locations beneath the checkered steel deck to support heavy vehicle loading.



LEGAL FOR TRADE

**ARMOR Weighbridge:**  
Cert. No. 17-047  
**SCBD Load Cell:**  
Cert. No. 16-088



**Notice of Approval**  
AM-4890

### ARMOR® Digital Truck Scale Portable Models

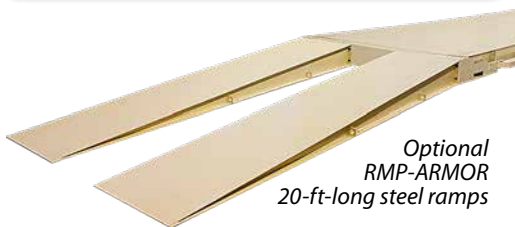
### SPECIFICATIONS

Overall Scale Height	18 in / 46 cm
Deck Type	Checkered steel deck
Deck Thickness	5/16 in / 0.8 cm thick
Paint	Anti-corrosion industrial tan powder paint
Gap Between Top of Pier to Bottom of Lower Frame	5.125 in / 13 cm for easy pier washouts
Overall Capacities	Ranging from 50 tons to 135 tons
Concentrated Load Capacity (CLC)	50 tons
Platform Sizes	Ranging from 20 ft up to 110 ft standard
Platform Width	10, 11, or 12 ft wide standard
Load Cell	Digital SmartCell model SCBD stainless steel waterproof load cell
Load Cell Type	Digital double-ended shear beam strain gauge design with 75,000 pound capacity
Load Cell Cables	Metal braided and run in continuous galvanized steel conduit

LENGTH (ft)	Overall Capacity (tons)	CLC (tons)	Num. Of Sections	WIDTH		
				10 Ft.	11 Ft.	12 Ft.
20	50	50	2	1010700	1010711	1010722
40	70	50	3	1010701	1010712	1010723
47	70	50	3	1010702	1010713	1010724
50	80	50	3	1010703	1010714	1010725
60	110	50	4	1010704	1010715	1010726
70	135	50	4	1010705	1010716	1010727
75	135	50	4	1010706	1010717	1010728
80	135	50	5	1010707	1010718	1010729
90	135	50	5	1010708	1010719	1010730
100	135	50	5	1010709	1010720	1010731
110	135	50	6	1010710	1010721	1010732

### OPTIONS

MODEL	DESCRIPTION
RMP-ARMOR	20 ft steel sloped approach ramp for ARMOR Portable (includes two 48 in wide ramps for one end)
LF-SK-1F	4 in strap kit for (1) ARMOR Portable (to be used with 20 ft x 11 ft ARMOR Portable)
LF-SK-2F	4 in strap kit for (2) ARMOR Portable (to be used with 40 ft x 11 ft, 47 ft x 11 ft, 50 ft x 11 ft, 60 ft x 11 ft, 70 ft x 11 ft)
LF-SK-3F	4 in strap kit for (3) ARMOR Portable (to be used with 80 ft x 11 ft, 90 ft x 11 ft, 100 ft x 11 ft, 110 ft x 11 ft)
SR-XXXXXXX	Guide Rails: 4-in/10-cm diameter bolt-on guide rails 8.5-in/22-cm above deck height
SRX-XXXXXXX	Taller Guide Rails: 4-in/10-cm diameter bolt-on guide rails 26-in/66-cm above deck height
SRXD-XXXXXXX	Double-Pipe Taller Guide Rails: Stacked double row of 4-in/10-cm diameter bolt-on guide rails 26-in/66-cm above deck height
WING-KIT	Left and right side bolt-on wing and required hardware for one end weighbridge to restrain rock ramp backfill
0330-0247-0A	4-inch-wide floating drop-in filler center module for use when connecting outer bridges down to smaller platform size



Cardinal Scale reserves the right to improve, enhance, or modify features and specifications without prior notice.