

# RL20000 S-Beam, Alloy Steel Load Cell

Named for their s-type shape, S beam load cells are most often found in mechanical-to-electronic scale conversion applications, suspended hoppers or tanks and general purpose weighing applications. These load cells are available in capacities ranging from 25 lbs through 20,000 lbs.

## Highlights

### Load Cell Technology

- Simplifies load measurements

### Rugged & Reliable

- Alloy steel construction
- Mechanically robust design
- Weather-resistant packaging

### Easy Attachment

- Convenient mounting on top and bottom of sensor

### Multiple Load Cell Capacities

- RL20000 - 25 lb.
- RL20000 - 50 lb.
- RL20000 - 75 lb.
- RL20000 - 100 lb.
- RL20000 - 150 lb.
- RL20000 - 200 lb.
- RL20000 - 250 lb.
- RL20000 - 300 lb.
- RL20000 - 500 lb.
- RL20000 - 750 lb.
- RL20000 - 1000 lb.
- RL20000 - 1500 lb.
- RL20000 - 2000 lb.
- RL20000 - 2500 lb.
- RL20000 - 3000 lb.
- RL20000 - 5000 lb.
- RL20000 - 10,000 lb.
- RL20000 - 15,000 lb.
- RL20000 - 20,000 lb.

## Load Sensing Made Easy!



**Precise**  
Nonlinearity from 0.03% of full scale.



**Rugged**  
High-alloy steel, nickel plated.  
Environmentally protected.



**Easy Mounting**  
Threaded mounting holes for easy attachment using standard fixtures.

## Approvals



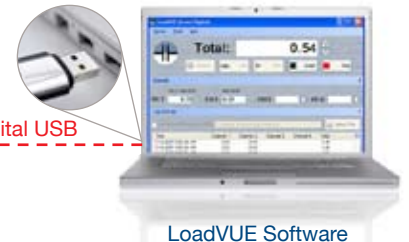
## Analog to Digital USB Output



Analog Signal



Digital USB



**1 Sense**

**2 Convert**  
DI-1000

**3 View & Process**  
LoadVUE, LoadVUE Lite

Simply connect the load cell to the DI-1000 Digital Load Cell Interface & use the USB out port on the DI-1000 to connect to a PC via the USB port. The load cell appears on the PC as a virtual COM port. Using a standard terminal emulator send commands to the sensor to display loads on screen. They can either be one at a time or in continuous operation mode. Alternatively, use an application (LoadVUE or LoadVUE Lite) to simplify load measurements on a PC.

Sensors



## Display & Controller



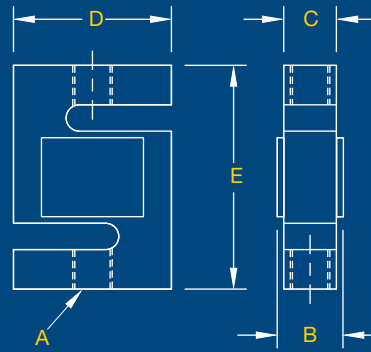
Software



# RL20000 S-Beam, Alloy Steel Load Cell

## Dimensions

Capacity (lb.)	A	B	C	D	E
25-300	1/4-28 UNF-2B	0.75	0.50	2.00	2.50
500-1500	1/2-20 UNF-2B	1.00	0.75	2.00	2.50
2000-2500	1/2-20 UNF-2B	1.25	1.00	2.00	2.50
3000	1/2-20 UNF-2B	1.25	1.00	3.00	4.00
5000-10,000	3/4-16 UNF-2B	1.25	1.00	3.00	4.00
15,000	1-12 UNF-2B	1.50	1.25	4.00	5.50
20,000	1 1/4-12 UNF-2B	2.25	2.00	5.00	7.00



## Load Cell Specifications

### Accuracy

Nonlinearity: 0.03% of Full Scale

Hysteresis: 0.02% of Full Scale

### Mechanical

Safe Overload 150% of Full Scale

### Electrical

Rated Excitation 10V DC (15V maximum)

Connections 20' Cable

Bridge Resistance 350 ohms, nominal

Full Scale Output 3.0 mV/V

Insulation Resistance 5000 megohms

### Environmental

Seal Type IP67 Environmentally Sealed

Compensated Temperature Range -10°C to +40°C (with tare)

## Optional DI-1000 Digital Load Cell Interface

Works with existing load cells and provides USB connectivity to a PC! Just plug in the RL-20000 S-beam load cell into one connector of the DI-1000 and plug the other USB connector to a PC and you get a PC ready load cell.

- Output - Virtual Com
- Output Format - ASCII Text
- Data Rate - 10 samples/sec

## Optional LoadVUE software

LoadVUE is Loadstar Sensors' software application that enables a user to read data from one to four load cells. The program permits you to display individual loads plus the sum of all loads, log data on screen & to a file as well as plot/chart the data for further analysis.

## Ordering Information

- 25 lb. - Part # 21428
- 50 lb. - Part # 21429
- 75 lb. - Part # 21430
- 100 lb. - Part # 21431
- 150 lb. - Part # 21432
- 200 lb. - Part # 21433
- 250 lb. - Part # 21434
- 300 lb. - Part # 21435
- 500 lb. - Part # 21436
- 750 lb. - Part # 21437
- 1000 lb. - Part # 21438
- 1500 lb. - Part # 21439
- 2000 lb. - Part # 21440
- 2500 lb. - Part # 21441
- 3000 lb. - Part # 21442
- 5000 lb. - Part # 21443
- 10,000 lb. - Part # 21444
- 15,000 lb. - Part # 21445
- 20,000 lb. - Part # 21446

## Wiring Information

### Cable Color Code

Red.....+ Excitation  
Black.....- Excitation  
Green.....+ Signal  
White.....- Signal

## Loadstar Sensors, Inc.

48089 Fremont Blvd.

Fremont, CA 94538

Phone: 510.623.9600

Fax: 510.623.9602

URL: [www.loadstarsensors.com](http://www.loadstarsensors.com)

Email: [info@loadstarsensors.com](mailto:info@loadstarsensors.com)