

# MINIATURE HIGH-CAPACITY "TOP HAT" LOAD CELL STANDARD AND METRIC MODELS

## LC307/LCM307 Series Compression

0-250 lb to 0-100,000 lb  
0-1 to 0-500 kN

1 Newton = 0.2248 lb  
1 daNewton = 10 Newtons  
1 lb = 454 g  
1 t = 1000 kg = 2204 lb

Starts at  
**\$375**



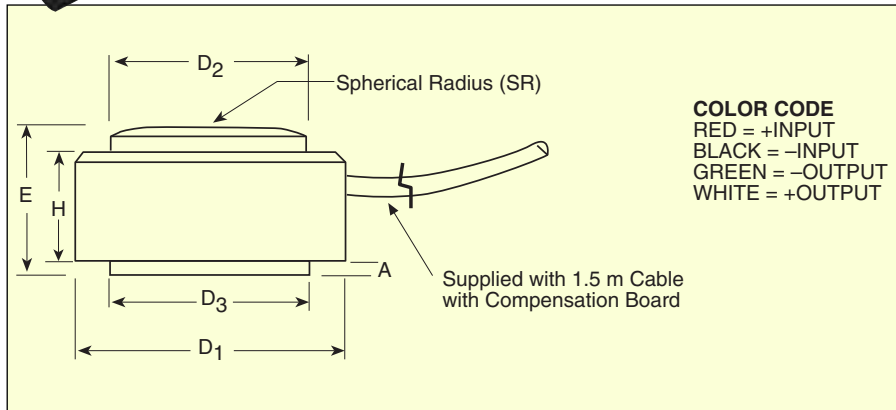
Small in size but not in performance, Series LC307/LCM307 top hat load cells are designed for applications with minimum space and high-capacity loads up to 100,000 lb. Rugged all stainless steel construction and high-performance strain gages ensure superior linearity and stability. Temperature compensation is done by a miniature circuit board in the load cell's cable. These cells are designed to be mounted on a smooth, flat surface.

### SPECIFICATIONS

- Excitation:** 5 Vdc
- Output:** 1.5 mV/V nominal
- Accuracy:** 0.75% FS BFSL (includes linearity, hysteresis and repeatability)
- Zero Balance:** ±2% FSO
- Operating Temp Range:** -54 to 121°C (-65 to 250°F)
- Compensated Temp Range:** 16 to 71°C (60 to 160°F)
- Thermal Effects:**
  - Span:** ±0.018% rdg/°C
  - Zero:** ±0.018% FSO/°C
- Safe Overload:** 150% of capacity
- Ultimate Overload:** 300% of capacity
- Bridge Resistance:** 350 Ω minimum
- Full Scale Deflection:** 0.001 to 0.003"
- Electrical Connection:** 1.5 m (5') 4-conductor cable with compensation board
- Protection Class:** IP54

LCM307-5KN, \$375, shown larger than actual size.

LCM307-5KN, \$375, shown actual size.



### STANDARD Dimensions: mm (in)

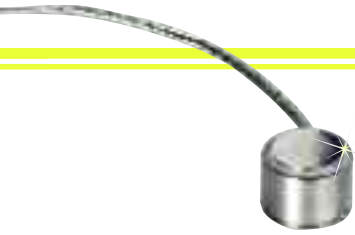
CAPACITY (lb)	D1	D2	D3	E	H
250	12.7 (0.50)	6.9 (0.27)	10.16 (0.40)	9.7 (0.38)	8.13 (0.320)
500	12.7 (0.50)	7.1 (0.28)	10.16 (0.40)	9.7 (0.38)	8.13 (0.320)
1000	12.7 (0.50)	7.9 (0.31)	10.16 (0.40)	9.7 (0.38)	8.13 (0.320)
2000	12.7 (0.50)	10 (0.41)	10.16 (0.40)	9.7 (0.38)	8.13 (0.320)
3000	12.7 (0.50)	11 (0.45)	10.16 (0.40)	9.7 (0.38)	8.13 (0.320)
5000	16.0 (0.63)	13.5 (0.53)	10.16 (0.40)	15 (0.60)	13.54 (0.533)
7500	22.2 (0.88)	17 (0.67)	10.16 (0.40)	16 (0.63)	13.97 (0.55)
10,000	22.2 (0.88)	19.3 (0.76)	10.16 (0.40)	16 (0.63)	13.97 (0.55)
50,000	44.5 (1.75)	31.8 (1.25)	10.16 (0.40)	35 (1.38)	31.34 (1.234)
100,000	50.8 (2.00)	38.1 (1.50)	10.16 (0.40)	41 (1.63)	37.33 (1.470)

### METRIC Dimensions: mm (in)

CAPACITY (kN)	D1	D2	D3	E	H	A
1 to 10	12.7 (0.500)	10.16 (0.400)	7.62 (0.300)	9.53 (0.375)	8.13 (0.320)	0.254 (0.010)
20	16.00 (0.630)	13.46 (0.530)	13.54 (0.533)	12.70 (0.600)	13.54 (0.533)	0.381 (0.015)
50	22.22 (0.875)	19.30 (0.760)	13.97 (0.550)	16.00 (0.630)	13.97 (0.550)	0.381 (0.015)
200	44.45 (1.750)	31.75 (1.250)	25.40 (1.000)	35.05 (1.380)	31.34 (1.234)	0.381 (0.015)
500	50.8 (2.000)	38.10 (1.500)	30.48 (1.200)	41.40 (1.630)	37.33 (1.470)	0.762 (0.030)

STANDARD MODELS    **MOST POPULAR MODELS HIGHLIGHTED!**

To Order (Specify Model Number)				
CAPACITY		MODEL NO.	PRICE	COMPATIBLE METERS**
lb	kN			
250	1.11	LC307-250	\$375	DPiS, DP41-S, DP25B-S
500	2.22	LC307-500	375	DPiS, DP41-S, DP25B-S
1000	4.45	LC307-1K	375	DPiS, DP41-S, DP25B-S
2000	8.90	LC307-2K	375	DPiS, DP41-S, DP25B-S
3000	13.3	LC307-3K	375	DPiS, DP41-S, DP25B-S
5000	22.2	LC307-5K	460	DPiS, DP41-S, DP25B-S
7500	33.4	LC307-7.5K	460	DPiS, DP41-S, DP25B-S
10,000	44.5	LC307-10K	460	DPiS, DP41-S, DP25B-S
50,000	222	LC307-50K	575	DPiS, DP41-S, DP25B-S*
100,000	445	LC307-100K	575	DPiS, DP41-S, DP25B-S*



LCM307-500, \$375, shown actual size.

Recommended Reference Book:  
Measure for Measure,  
**OP-17, \$15.**  
See Section Y  
For Additional Books.



Comes complete with 5-point  
NIST-traceable calibration and 59 kΩ shunt data.

\* 4-digit meter.

\*\* See section D for compatible meters.

Ordering Examples: LC307-5K, 5000 lb  
capacity top hat load cell, \$460.

LC307-500, 500 lb capacity top hat  
load cell, \$375.

LCM307-50KN, 50 kN capacity top hat  
load cell, \$460.

LCM307-10KN, 10 kN capacity top hat  
load cell, \$375.

**METRIC MODELS**

CAPACITY		MODEL NO.	PRICE	COMPATIBLE METERS**
kN	lb			
1	225	LCM307-1KN	\$375	DPiS, DP41-S, DP25B-S
2	450	LCM307-2KN	375	DPiS, DP41-S, DP25B-S
5	1124	LCM307-5KN	375	DPiS, DP41-S, DP25B-S
10	2248	LCM307-10KN	375	DPiS, DP41-S, DP25B-S
20	4496	LCM307-20KN	375	DPiS, DP41-S, DP25B-S
50	11,240	LCM307-50KN	460	DPiS, DP41-S, DP25B-S
200	44,960	LCM307-200KN	460	DPiS, DP41-S, DP25B-S
500	112,400	LCM307-500KN	460	DPiS, DP41-S, DP25B-S

# MAKE IT WIRELESS! ADD WIRELESS CAPABILITY TO YOUR PROCESS MEASUREMENT SYSTEM!



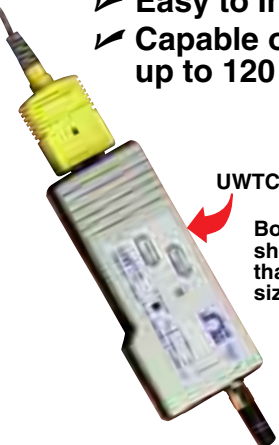
WRS232-USB wireless transmitter,  
\$159, shown close to actual size.

Wireless Connections From  
Your Sensor to Your  
Instrumentation:

- ✓ Thermocouple, RTD, Infrared Temperature, Humidity, pH, as well as Process Voltage/Current
- ✓ Easy to Install and Use
- ✓ Capable of Distances up to 120 m (400')



For Complete  
Details, See  
Wireless  
Section W



UWTC-1, \$125.

Both models  
shown smaller  
than actual  
size.

UWTC-REC2,  
\$235, available  
with 4 to 20 mA, 0 to 5 Vdc,  
0 to 10 Vdc and Type K  
thermocouple output.



Laptop not included.

Wireless Communications  
From Your Instrument to  
a PC:

- ✓ Convert the RS232 Signal on Your Meter, Controller or PLC
- ✓ Works with any PC with a USB Port
- ✓ Easy to Install with Seamless Operation
- ✓ Capable of Distances up to 120 m (400')

LOAD CELLS  
**F**



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

[www.omega.de](http://www.omega.de)  
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0800-8266342

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#### CZECH REPUBLIC

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596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
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0800-099-33-44



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### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters