

MINIATURE HIGH-CAPACITY "TOP HAT" LOAD CELL

STANDARD AND METRIC MODELS

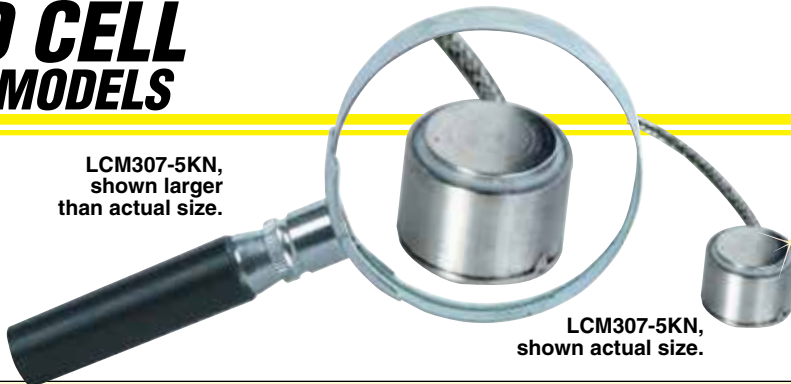


Compression

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

LCM307-5KN,
shown larger
than actual size.

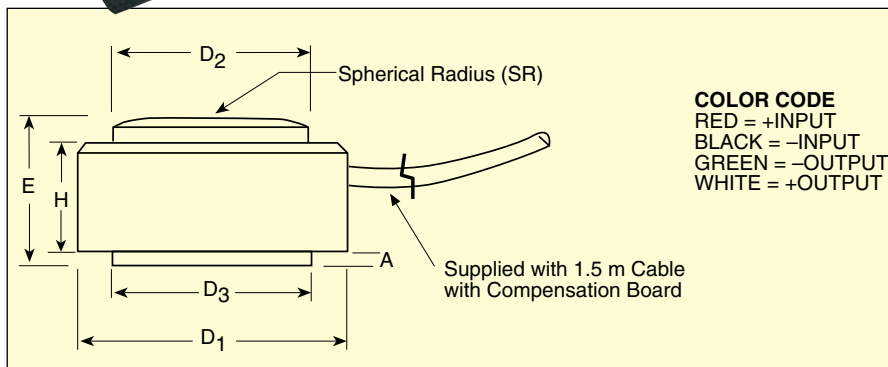


LCM307-5KN,
shown actual size.

LC307/LCM307 Series



Standard



COLOR CODE
RED = +INPUT
BLACK = -INPUT
GREEN = -OUTPUT
WHITE = +OUTPUT

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

STANDARD Dimensions: mm (inch)

| CAPACITY (lb) | D1 | D2 | D3 | E | H | A |
|---------------|-------------|-------------|-------------|-------------|-------------|------------|
| 250 | 12.7 (0.5) | 10.2 (0.40) | 5.8 (0.23) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 500 | 12.7 (0.5) | 10.2 (0.40) | 5.8 (0.23) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 1000 | 12.7 (0.5) | 10.2 (0.40) | 6.1 (0.24) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 2000 | 12.7 (0.5) | 10.2 (0.40) | 7.1 (0.28) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 3000 | 12.7 (0.5) | 10.2 (0.40) | 7.6 (0.30) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 5000 | 16 (0.63) | 13.5 (0.53) | 13.5 (0.53) | 15.2 (0.60) | 13.5 (0.53) | 0.4 (0.02) |
| 7500 | 22.2 (0.88) | 19.3 (0.76) | 12.7 (0.50) | 16 (0.63) | 14 (0.55) | 0.4 (0.02) |
| 10,000 | 22.2 (0.88) | 19.3 (0.76) | 14 (0.55) | 16 (0.63) | 14 (0.55) | 0.4 (0.02) |
| 50,000 | 44.5 (1.75) | 31.8 (1.25) | 25.4 (1.00) | 35.1 (1.38) | 31.4 (1.23) | 0.4 (0.02) |
| 100,000 | 50.8 (2.00) | 38.1 (1.50) | 30.5 (1.20) | 41.4 (1.63) | 37.3 (1.47) | 0.8 (0.03) |

METRIC Dimensions: mm (inch)

| CAPACITY (kN) | D1 | D2 | D3 | E | H | A |
|---------------|-------------|-------------|-------------|-------------|-------------|------------|
| 1 | 12.7 (0.50) | 10.2 (0.40) | 5.8 (0.23) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 2 | 12.7 (0.50) | 10.2 (0.40) | 5.8 (0.23) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 5 | 12.7 (0.50) | 10.2 (0.40) | 6.1 (0.24) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 10 | 12.7 (0.50) | 10.2 (0.40) | 7.1 (0.28) | 9.5 (0.38) | 8.1 (0.32) | 0.3 (0.01) |
| 20 | 16 (0.63) | 13.5 (0.53) | 13.5 (0.53) | 15.2 (0.6) | 13.5 (0.53) | 0.4 (0.02) |
| 50 | 22.2 (0.88) | 19.3 (0.76) | 14 (0.55) | 16 (0.63) | 14 (0.55) | 0.4 (0.02) |
| 200 | 44.5 (1.75) | 31.8 (1.25) | 25.4 (1.00) | 35.1 (1.38) | 31.4 (1.23) | 0.4 (0.02) |
| 500 | 50.8 (2.00) | 38.1 (1.50) | 30.5 (1.20) | 41.4 (1.63) | 37.3 (1.47) | 0.8 (0.03) |

STANDARD MODELS

To Order

| CAPACITY | | MODEL NO. | COMPATIBLE METERS** |
|----------|------|------------|------------------------|
| lb | kN | | |
| 250 | 1.11 | LC307-250 | DPiS, DP41-S, DP25B-S |
| 500 | 2.22 | LC307-500 | DPiS, DP41-S, DP25B-S |
| 1000 | 4.45 | LC307-1K | DPiS, DP41-S, DP25B-S |
| 2000 | 8.90 | LC307-2K | DPiS, DP41-S, DP25B-S |
| 3000 | 13.3 | LC307-3K | DPiS, DP41-S, DP25B-S |
| 5000 | 22.2 | LC307-5K | DPiS, DP41-S, DP25B-S |
| 7500 | 33.4 | LC307-7.5K | DPiS, DP41-S, DP25B-S |
| 10,000 | 44.5 | LC307-10K | DPiS, DP41-S, DP25B-S |
| 50,000 | 222 | LC307-50K | DPiS, DP41-S, DP25B-S* |
| 100,000 | 445 | LC307-100K | DPiS, DP41-S, DP25B-S* |

LCM307-500,
shown larger
than actual size.



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

* 4-digit meter.

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

LC307-500, 500 lb capacity top hat
load cell.

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

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

METRIC MODELS

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

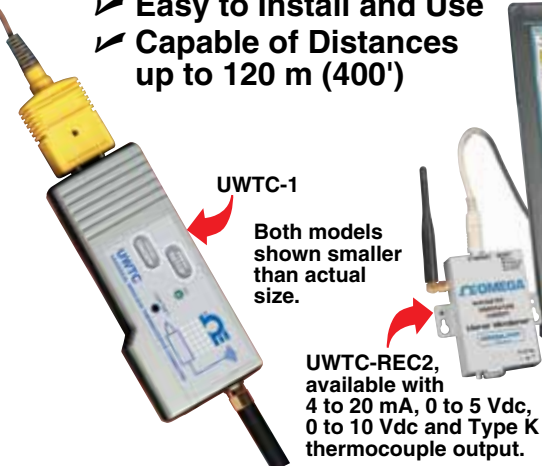
MAKE IT WIRELESS! ADD WIRELESS CAPABILITY TO YOUR PROCESS MEASUREMENT SYSTEM!



WRS232-USB wireless transmitter,
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')



UWTC-1

Both models
shown smaller
than actual
size.

UWTC-REC2,
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')