

## Load Cells

■ For tension

### LTS

Small range



Load cell for tension

- Capacity: 0.5N
- Accuracy: within  $\pm 1\%$ F.S.
- Dimension: W34×D23×H55mm
- Cable length: Approx. 1m

Model	Capacity	Thread
LTS-0.5N	0.5N	M2

■ For tension/Compression

### DPU

Standard



Load cell for tension/compression

- Capacity: 2N~500N
- Accuracy: within  $\pm 0.2\%$ F.S.
- Dimension: W58×D21×H71~W72×D21×H73mm
- Cable length: Approx. 2m

Model	Capacity	Thread
DPU-2N	2N	M6
DPU-5N	5N	
DPU-10N	10N	
DPU-20N	20N	
DPU-50N	50N	
DPU-100N	100N	
DPU-200N	200N	
DPU-500N	500N	

### DPU

High capacity



Load cell for tension/compression

- Capacity: 1000N~20kN
- Accuracy: within  $\pm 0.2\%$ F.S.
- Dimension: W58×D24×H130~W88×D40×H155mm
- Cable length: Approx. 3m

Model	Capacity	Thread
DPU-1000N	1000N	M10
DPU-2000N	2000N	
DPU-5000N	5000N	
DPU-10kN	10kN	
DPU-20kN	20kN	M18P1.5 D22 female screw

### LU

Multipurpose



Load cell for tension/compression

- Capacity: 50N~2000N
- Accuracy: within  $\pm 1\%$ F.S.
- Dimension:  $\phi 28 \times H35$ mm
- Cable length: Approx. 3m

Model	Capacity
LU-50N	50N
LU-100N	100N
LU-200N	200N
LU-500N	500N
LU-1000N	1000N
LU-2000N	2000N

### LMU

Small size



Load cell for tension/compression

- Capacity: 50N~500N
- Accuracy: within  $\pm 1\%$ F.S.
- Dimension:  $\phi 18 \times H25$ mm
- Cable length: Approx. 2m

Model	Capacity	Thread
LMU-50N	50N	M5P0.8
LMU-100N	100N	
LMU-200N	200N	
LMU-500N	500N	

### WP-50N

Waterproof



Load cell for tension/compression

- Capacity: 50N
- Accuracy: within  $\pm 0.5\%$ F.S.
- Use environment: IP65
- Dimension: W70×D30×H58mm
- Cable length: Approx. 30cm

Model	Capacity	Thread
WP-50N	50N	M6

■ For Compression

### LC

Multipurpose



Load cell for compression

- Capacity: 500N~20kN
- Accuracy: within  $\pm 0.5\%$ F.S.
- Dimension:  $\phi 50 \times H25$ mm
- Cable length: Approx. 3m

Model	Capacity
LC-500N	500N
LC-1000N	1000N
LC-2000N	2000N
LC-5000N	5000N
LC-10kN	10kN
LC-20kN	20kN

### LM

Small size



Load cell for compression

- Capacity: 5N~20kN
- Accuracy: 5~2000N~within  $\pm 1\%$ F.S., 5000N/10kN~within  $\pm 1.5\%$ F.S., 20kN~within  $\pm 2.5\%$ F.S.
- Dimension:  $\phi 12 \times H4$ mm~ $\phi 21 \times H10$ mm
- Cable length: Approx. 2m

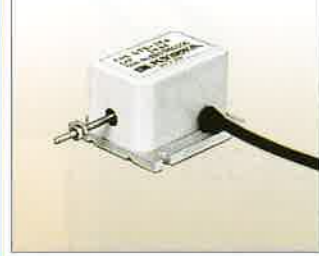
Model	Capacity
LM-5N	5N
LM-10N	10N
LM-20N	20N
LM-50N	50N
LM-100N	100N
LM-200N	200N
LM-500N	500N
LM-1000N	1000N
LM-2000N	2000N
LM-5000N	5000N
LM-10kN	10kN
LM-20kN	20kN

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DPU-20N	20N	
DPU-50N	50N	
DPU-100N	100N	
DPU-200N	200N	
DPU-500N	500N	

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LU-200N	200N
LU-500N	500N
LU-1000N	1000N
LU-2000N	2000N

\*When you connect a load cell to ZPS/Z2S display and FA Plus force amp., adjustment is necessary whenever load cell is changed.  
\*The accuracy of the load cells are guaranteed when connected to IMADA display and amplifier.  
\*We can offer customized load cells as requested.

! Please note that Force gauges and load cells are easily broken if force exceeding capacity is applied, regardless power on/off. Make sure to avoid overload.

■Load Cells for Other Purposes

### LMT-1000N

High temperature



Load cell for compression

- Capacity: 1000N
- Accuracy: within  $\pm 5\%$ F.S.
- Use temperature: -40~+130°C
- Dimension:  $\phi 14 \times H4.3$ mm
- Cable length: Approx. 2m

Model	Capacity
LMT-1000N	1000N

### PN-50N

Pen type



Load cell for compression

- Capacity: 50N
- Accuracy: within  $\pm 2\%$ F.S.
- Dimension:  $\phi 20 \times H90$ mm
- Cable length: Approx. 2m

Model	Capacity	Thread
PN-50N	50N	M6

### TFC

For torque



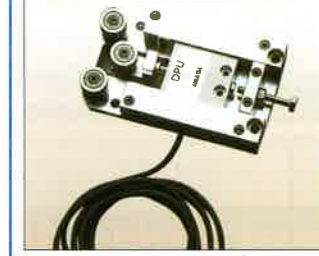
Load cell for torque

- Capacity: 200N-cm~1000N-cm
- Accuracy: within  $\pm 0.5\%$ F.S.
- Dimension:  $\phi 60 \times H53$ mm
- Cable length: Approx. 2m

Model	Capacity
TFC-200Nc	200N-cm
TFC-500Nc	500N-cm
TFC-1000Nc	1000N-cm

### TMS

For String Tension



Load cell for wire/string tension

- Capacity: 500N~2000N
- Accuracy: within  $\pm 0.5\%$ F.S.
- Dimension: TMS-50=W100 × D31 × H170mm, TMS-100/200=W120 × D45 × H250mm
- Cable length: Approx. 2m

Model	Capacity
TMS-500N	500N
TMS-1000N	1000N
TMS-2000N	2000N

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LMU-50N	50N	M5P0.8
LMU-100N	100N	
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Waterproof



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- Capacity: 50N
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- Uses environment: IP65
- Dimension: W70 × D30 × H58mm
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LC-1000N	1000N
LC-2000N	2000N
LC-5000N	5000N
LC-10kN	10kN
LC-20kN	20kN

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LM-20N	20N
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LM-100N	100N
LM-200N	200N
LM-500N	500N
LM-1000N	1000N
LM-2000N	2000N
LM-5000N	5000N
LM-10kN	10kN
LM-20kN	20kN

### DM-2000N

For Door



Load cell for automatic door

- Capacity: 2000N
- Accuracy:  $\pm 2\%$
- Dimension: W94 × D66 × H380mm
- Cable length: Approx. 2m

Model	Capacity
DM-2000N	2000N

## Desktop Force Amplifier

### FA Plus

FA Plus can be connected to any load cells and used under various measurement conditions.

Digital Force Analyzer: FA Plus



■Specifications of FA Plus

- Unit: N (kN), kgf (gf), lbf (ozf)
- Display mode: Track/peak mode
- Display: 4-digits LCD with sign
- Sampling speed: 2000times/sec.
- LCD display update: 10times/sec.
- Capacity: Depends on Load cell
- Accuracy:  $\pm 0.2\%$ F.S.  $\pm 1$ digit(DPU series)
- Environment: 0~+40°C, 20~80% RH
- Power: AC100V~240V
- Optput: USB, RS232C, Analog (Approx.  $\pm 2V$  F.S.), Comparator output, Overload output
- External connection switch: External control is possible
- Accessories: FAP Logger
- Weight: Approx. 1.5kg
- Size: W210 × D160 × H99mm

- Used for strength test for various materials.(tension test, compression test, shearing test, peeling test and so on.)
- High-speed force sampling(2000 times/sec.). More precise value is measured especially at impulse experiment.
- High efficiency for measurement of factory automation system with external in/output signal.
- Separated load cell and amp are efficient when used for dangerous measurement or used in small space.
- Easy to make force-displacement graph.
- (Optional software: F-S Recorder is needed. To page 9, 29)