



LPW Series

FEATURES

data sheet)

- Ratings: 3.5 to 1500 tonne
- Stainless steel construction
- Environmentally sealed to IP67
- Anti-rotation plate supplied if required
- Design support software available







The LCM range of wireless load measuring pins are designed for general use. They are a simple and versatile type of load cell that are used in a large variety of applications such as cranes, winches, hoists, load shackles and bearing blocks. They are easily installed into machines by replacing any existing load bearing pin to provide accurate, real time monitoring of load forces. Machined from high tensile stainless steel and normally supplied complete with an anti- rotation plate, all our load measuring pins are built to exacting standards and proof loaded to 150% of normal rated load. Our standard wireless load pin range covers ratings between 3.5 and 1500 tonnes, and can be provided as shown on this data sheet or can be modified to meet a particular application requirement (see LPB

The unique wireless housing is manufactured from semi-aromatic polyamide plastic making the load cell far more compact and reducing the overall product weight. Located in the housing are two AAA alkaline batteries which can be easily accessed by removing the telemetry housing cover, while the internal electronics underneath remain completely sealed. The antenna is also internally mounted, protecting it from accidental damage during use and handling. The batteries are standard AAA alkaline batteries, which are readily available and low cost. The LPW is supplied as standard without any additional wireless devices to enable greater flexibility with the configuration and ordering of the product. The LPW can be used with any of the T24 range of wireless instrumentation, whether this be for a simple display system using the T24-HS-LS, or more complex systems using multiple load cells and multiple wireless devices.

For more sophisticated systems, including datalogging or monitoring/reporting requirements, we are able to offer a robust tablet PC with installed software for use with single or multiple load cell installations. Our sales team will be happy to discuss the best wireless system configuration to suit your requirements.

TYPICAL APPLICATIONS

- Crane overload protection
- Winch force monitoring
- Cable and wire dynamometers
- Hoist overload protection
- Mooring load tension measurement

AVAILABLE OPTIONS

- Special ratings and sizes (see LPB data sheet)
- Hazardous Area certified Intrinsically Safe (Ex i)
- Various wireless accessories available. See T24 range of wireless products

AVAILABLE OF HONS

SPECIFICATIONS

Rated load (tonne)	3.5, 6.5, 15, 25, 50, 100, 250, 500, 750, 1000, 1500
Proof load	150% of rated load
Ultimate breaking load	>300% of rate load
Non-linearity	<±1.0% of rated load (typically)
Non-repeatability	<±0.1% of rated load
Transmission distance	Up to 600 metres (clear line of sight)





SPECIFICATIONS (CONTINUED)

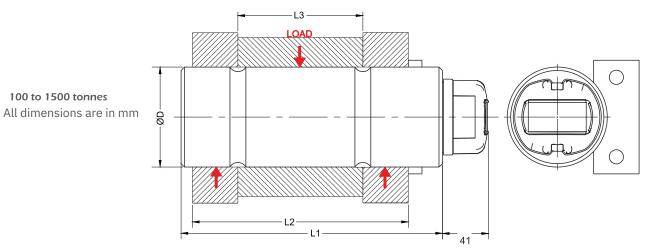
Battery life	>300 hours (continuous with 1.2Ah batteries)				
Battery Standard Ex i	AAA Alkaline x 2 (supplied with 1.2Ah batteries) AAA L92 Lithium x 2 (supplied with 1.2Ah batteries)				
Operating temperature range	-20 to +55°C (-20 to +50°C for Ex i versions)				
ATEX certification details	II 2G Ex ib IIC T4 Gb				
Environmental protection level	IP67				
Telemetry housing	Polyamide resin				

DIMENSIONS



L3

3.5 to 50 tonnes Ø All dimensions are in mm





100 to 1500 tonnes



Rating (tonnes)	Part No.	ØD	L1	L2	L3	Weight (kgs)	Resolution (tonnes)
3.5	LPW-30-75	30	129	75	50	1.4	0.02
6.5	LPW-40-95	40	149	95	63	2	0.02
15	LPW-50-114	50	174	114	75	3.1	0.05
25	LPW-63-152	63	219	152	89	5.6	0.1
50	LPW-75-175	75	249	178	102	8.6	0.2
100	LPW-88-190	88	230	190	110	11.8	0.5
200	LPW-125-220(200)	125	300	220	130	29.8	1
250	LPW-125-220	125	300	220	130	29.8	1
500	LPW-170-370	170	440	370	225	79.2	2
750	LPW-200-500	200	590	500	295	146	2
1000	LPW-250-612	250	712	612	360	275	5
1500	LPW-275-731	275	832	731	430	389	5

Note 1: Part numbers for ATEX versions will be suffixed with -ATEX-I e.g. LPW-30-75-ATEX-I.

Note 2: Dimensions may change for hazardous area versions.

WIRELESS RECEIVERS/DISPLAY OPTIONS



T24-HS-LS Simple wireless display for connecting to 1 load cell



T24-HA
Wireless display for connection to up to 12 load cells



T24-HR
Wireless display for connecting to multiple load cells



X24-HD
ATEX Wireless display
for connection to up to
24 load cells

WIRELESS BASE STATION OPTIONS



T24-BSuWireless USB
connected base
station



T24-BSdWireless compact USB connected dongle base station



T24-BSueWireless USB
extended range base
station



T24-BSiWireless USB, RS485,
RS232 connected
base station





WIRELESS OUTPUT MODULE OPTIONS



T24-RM1Wireless relay,
switch output
module



T24-S0Wireless serial
ASCII output
module



T24-A01Wireless analogue output module



T24-PR1
Wireless surface
mounting tally roll
printer



T24-AR Wireless range extender repeater module

WIRELESS SOFTWARE OPTIONS



LCM Systems are able to offer various software solutions for our wireless range of load cells. We encourage you to speak to our sales team to discuss any standalone software requirements you may have.

The solutions we regularly offer include centre of gravity weighing and reporting, multiple load cell display & reporting and PC based datalogging. Other solutions can also be offered.

For more detailed information regarding wireless instrumentation visit www.lcmsystems.com/T24

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