



## LOAD LINK



Accurate and reliable tensile load monitoring for lifting applications.

Suitable for all industry sectors including Marine, Offshore and Subsea.

Ideal for mobile applications and services.

Retro-fit load monitoring to existing applications where shackles already available

Wireless and Cable versions

### Features:

- 13 Load Link designs from 5Te to 500Te as standard other capabilities on request.
- Robust, Lightweight, High Tensile aluminium design using high grade material.
- Wireless and cabled options available.
- Internal Antenna on all wireless models.
- Fits all major shackle manufacturers including Van Beest, Crosby and GN Rope.
- Load Links designed to be rigged & operational with a Working Load Link (WLL) of the same capacity.
- Safety Factor of 5:1
- Accuracy <0.5% of applied load.
- Matched handheld telemetry display.
- Data logging software available.
- ATEX versions available for Zones 0, 1, & 2.
- Subsea variants available on request.
- Every unit load tested and certified.
- Designed & Manufactured at Power Jacks in the UK.

### Applications

For lifting and static systems in:

- Under-hook crane weighing
- Cable Tension monitoring
- Crane / Hoist Load Testing
- Water Weight/Bag Calibration
- Warehouse despatch weighing
- Beam Proof Load Testing
- Towing load monitoring
- Mooring load monitoring
- Crane safe load monitoring
- Anchor line tension monitoring
- Static wireline tension
- Crane Load Calibration
- Subsea Vehicle Lifting
- Onshore and Offshore wind turbine installation

# Specification



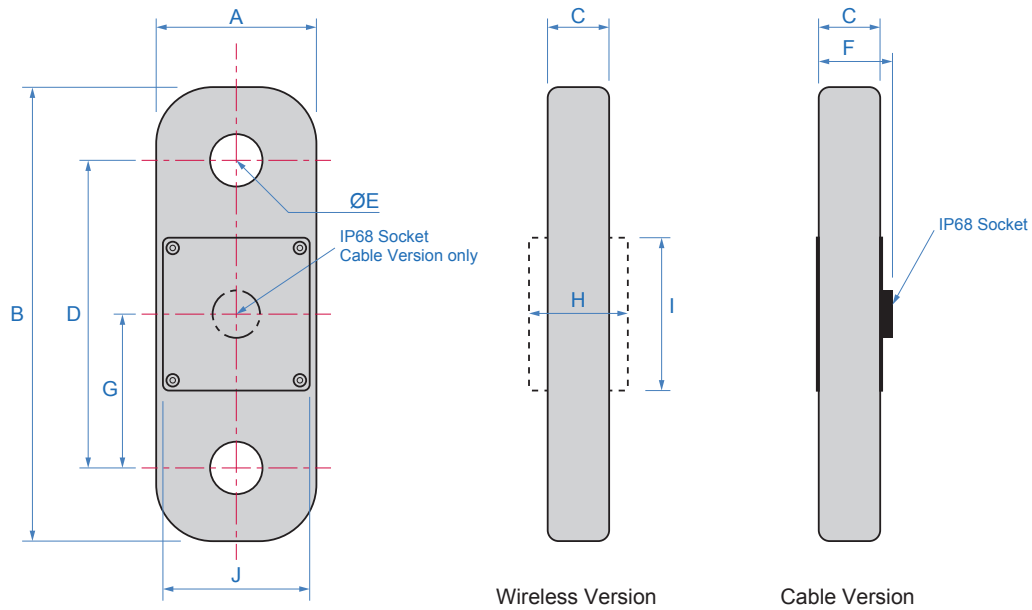
Cabled Version Plug & Socket Connector on back of Load Link



Removable battery access panel on rear of Wireless Load Link

Main Features		
Overload Tested (Proof Load)		150% Rated Load
Minimum Breaking Load (MBL)	5Te to 400Te	500% Rated Load
	500Te	450% Rated Load
Dead Load Offset		+/- 0.1mV
Accuracy		< 0.5% of Applied Load
Repeatability		< +/- 0.1% of applied load
Hysteresis up to FS		Minimal
Operating temperature		-20°C to +70°C
Environmental Rating		IP67
Range		200m
Transmit rate		900ms (standard)
Antenna (Wireless Version)		Internal
Radio (Wireless Version)		2.4 Ghz; Worldwide Licence Free
Cabled Version Output Signals		Analogue Signals 4-20mA in 2 or 3 wire output with 10-30VDC supply 0-5VDC or 0-10VDC 3-wire output with 10-30VDC supply Digital Signals RS232 with a protocol of your choice with 5-20VDC supply RS485 with a protocol of your choice with 5-20VDC supply
Cable Version Connection Type		Load link with Plug-in Socket and 15m, 4-core screened PUR cable with matched plug-in connector fitted. Other types available on request.
Battery Type / Lifespan	Load Cells	Batteries: 2 x AAA 1.5V for 5Te Load Link @ 500+ hours (continuous) Batteries: 2 x C 1.5V for 12.5Te-500Te Load Link @ 2000+ hours (continuous) Provides 1 year of use based on 8 hour per day. Reducing the requirement to change batteries between calibrations.
	Display	2 x AA1.5V batteries @ 40 hours (continuous)
Calibration		12 months (calibration service available)
Material		Lightweight, High Tensile Grade Aluminium
Finish		Hard Anodised for Marine Environments
Traceability and Safety Compliance		BS EN ISO 7500-1:2004 BS 8422:2003 Loler Statutory Instrument 1998, No. 2307 Machinery Directive 2006/42/EC (SI 2008/1597)
Shackle Compatibility (include):		
Van Beest		G-4163, P6036 Safety bow
GN Rope		H9 & H10 Safety Bow
Crosby		G2130, G2140
ATEX Options		
Zone 2		Standard Options (Wireless and Cabled)
Zone 1		Cabled Options - Consult LMS for more details
Zone 0		Stainless Steel Construction, Cabled Options - Consult LMS for more details

# Design Detail



Wireless Version

Cable Version

Capacity (Tonne)	5	12.5	25	35	50	75	100	150	200	250	300	400	500
Dimensions (mm)													
A	84	143	143	157	183	198	220	272	331	395	472	550	570
B	238	366	382	436	470	518	590	695	769	879	977	1037	1137
C	32	45	62	70	75	104	124	150	165	177	182	182	225
D	162	256	238	256	286	310	350	395	419	469	517	547	607
ØE	27	40	55	61	75	86	100	118	135	145	158	180	190
F	50	63	80	88	93	122	142	168	173	195	200	200	243
G	81	128	119	128	143	155	175	197.5	209.5	234.5	258.5	273.5	303.5
H	52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
I	92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
J	76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
To fit Shackle Size (Tonne)	6.5	13.5	25	35	55	85	120	150	200	250	300	400	500
Weight (kg)	1.5	6	8	12	15	23	37	63	93	135	186	228	322
Suggested Safety Bow Shackles													
Van Beest	G4163						P6036						
GN Rope	H9						H10						
Crosby	G2130 to G2140												

## Cable Version Plug Details

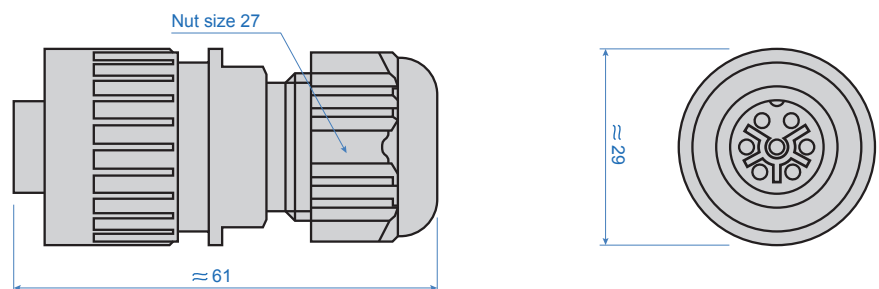
IP68 Plug Connector

Pin 1 = Power +ve

Pin 2 = Power -ve

Pin 3 = Signal +ve

Pin 4 = Signal -ve



## Handheld Load Cell Telemetry Display

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- Matched for use with our load link.
- Simple to use keypad with multidigit, 9mm LCD display
- Calibrated in Tonne with kg resolution accuracy (alternative weighing units on request e.g. kg, lb, kN)
- Worldwide licence exempt 2.4GHz radio
- Low power consumption for longer battery life
- 2 x AA 1.5V batteries @ 40 hours (continuous)
- Enclosure: IP65
- RS232 output available on request.
- Displays for cabled load links available on request.

## Data Logging

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- Monitor up to 100 load cells simultaneously.
- Data can be transmitted to Local PC for immediate display.
- Live logging and graph display
- Exportable to Excel
- User can plot graph, capture peak loads and analyse data for producing reports and presentations.
- MS Windows based
- Standard product uses discrete USB powered Base station so that no hardware installation required.
- Access your data anywhere on any device via the built in web server.

## Load Link Carry Case

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### Portable Made Easy with our Load Link Carry Case

- Rugged carry case with metal frame.
  - Foam inserts to firmly hold load link, telemetry display and spare set of batteries.
  - Space inside to store connecting cable for wired units and matched set of shackles.
  - Lockable case.
  - Available for 5Te to 100Te load link sizes.
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