



# WLL Stainless Steel Wireless Load Link

## Description

The WLL series of wireless load monitoring links have been designed for lifting and weighing in rugged or harsh environments, being manufactured from stainless steel for corrosion resistance. It complies with the European Machinery Directive 2006/42/EC and is supplied in a robust storage case.

The WLL wireless series are simple to install and are matched to standard shackle sizes. The unique wireless housing is manufactured from semi-aromatic polyamide plastic making the load link 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 WLL is supplied as standard without any additional wireless devices to enable greater flexibility with the configuration and ordering of the product. The WLL 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.

The WLL series can be provided as shown in this datasheet or can be modified to meet a particular application requirement. We are always pleased to discuss any special requirements that can be accommodated.

## Specification

Rated load (tonne)	5, 12, 25, 35, 50, 100
Proof load	200% of rated load
Ultimate breaking load	>500 % of rated load
Accuracy	<±0.1% of rated load
Non-repeatability	<±0.1% of rated load
Transmission distance	Up to 600 metres (clear line of sight)
Battery life	>300 hours (continuous use, with 1.2Ah batteries)
Battery (standard)	2 x AAA Alkaline (supplied with 1.2Ah batteries)
(ATEX)	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)
Compensated temperature range	-10 to +50°C
Zero temperature coefficient	<±0.01% of rated load/°C
Span temperature coefficient	<±0.01% of rated load/°C
ATEX certification details	II 2G Ex ib IIC T4 Gb
Environmental protection level	IP67
Approvals	European Machinery Directive 2006/42/EC

## Available Options

- Special ranges and sizes available
- Hazardous Area certified - Intrinsically Safe (Ex i)
- Ruggedised Tablet PC, with bespoke software for datalogging, reporting etc.
- Various other wireless accessories available. See T24 range of wireless products
- T24-HA display, for multiple load cell system
- Can be supplied complete with shackles



## Features

- Ranges: 5 to 100 tonne
- Stainless steel construction (17-4PH H900)
- Environmentally sealed to IP67
- Simple installation and operation
- Special sizes and ranges available
- Higher range versions available
- Machinery Directive 2006/42/EC compliant

## Typical Applications

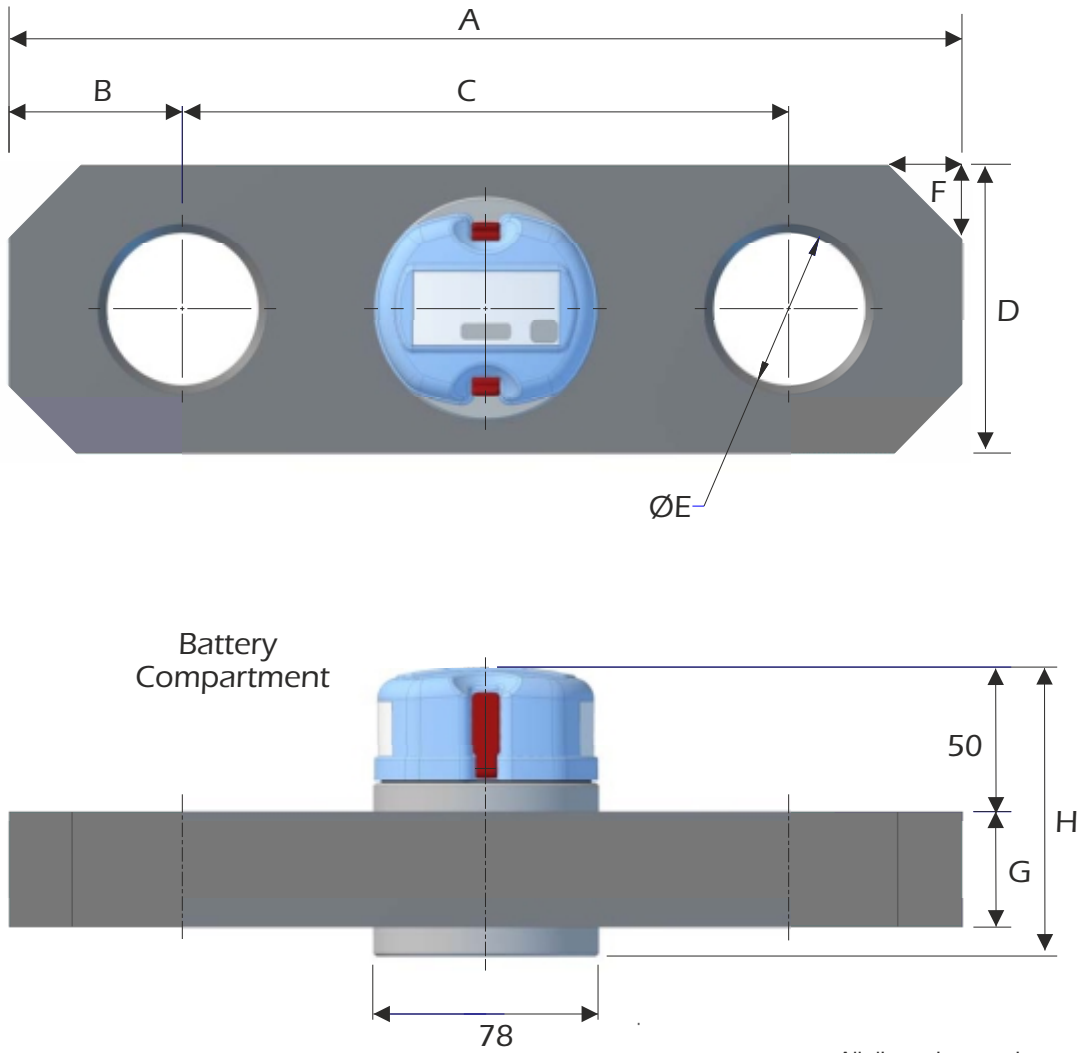
- Cable tension monitoring
- Under-hook hoist and crane weighing
- Towing/mooring tension
- Crane safe load monitoring
- Water bag weighing

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 Visit our website [www.lcmsystems.com](http://www.lcmsystems.com)  
 (In-stock items usually ship within 48 hours)



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## Dimensions



All dimensions are in mm

Rating (tonnes)	Part Number	A	B	C	D	ØE	F	G	H	Weight (kg)	Resolution (tonnes)
5	WLL-05	220	32.5	155	78	27	20 x 45°	22	82	3	0.005
12	WLL-12	260	40	180	85	37	20 x 45°	32	92	5	0.01
25	WLL-25	320	55	210	102	53	25 x 45°	43	103	9.7	0.02
35	WLL-35	350	57.5	235	122	52	30 x 45°	42	102	13	0.05
50	WLL-50	400	62.5	275	140	59	35 x 45°	50	110	20	0.05
100	WLL-100	460	91	278	200	84	50 x 45°	68	120	43.5	0.1

Note 1: Part numbers for ATEX versions will be suffixed with -ATEX-I e.g. WLL-25-ATEX-I.

Note 2: Dimensions may change for hazardous area versions.

# WLL Stainless Steel Wireless Load Link

## Storage Case

The WLL load link is supplied in a quality, lockable moulded polyurethane transit case that is highly durable and impervious to most chemicals and moisture. Its robust moulded construction also means that it will not dent or rust. The case also features pre-cut foam inserts that ensure the load link and a handheld display remain securely in place.



Load Link Rating (tonnes)	Case Dimensions	With Wheels	Weight (kg)
5, 12, 25, 35	460 x 350 x 180mm	No	3.1
50	550 x 350 x 180mm	No	5.6
100	650 x 520 x 270mm	Yes	8.6

## Compatible Load Shackles

Rating (tonnes)	Crosby Load Shackles	Van Beest Load Shackles	GN Rope Load Shackles
5	6.5te Crosby G-2130	6.5te Green Pin G4163	6.5te GN Rope H9
12	12te Crosby G-2130	12te Green Pin G4163	12te GN Rope H9
25	25te Crosby G-2130	25te Green Pin G4163	25te GN Rope H9
35	40te Crosby G-2140	40te Green Pin G5263	40te GN Rope H10 Super
50	55te Crosby G-2140	55te Green Pin G5263	55te GN Rope H10 Super
100	120te Crosby G-2140	120te Green Pin G5263	120te GN Rope H10 Super

## Easily accessible batteries



A summary of available wireless devices that can be used to enhance the WLL in your application can be viewed on the next page of this datasheet.

For further assistance on system configuration, please call us or email your requirements to [sales@lcmsystems.com](mailto:sales@lcmsystems.com).

# WLL Stainless Steel Wireless Load Link



## 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-BSu**  
Wireless USB connected base station



**T24-Bsd**  
Wireless compact USB connected base station



**T24-BSue**  
Wireless USB extended range base station



**T24-BSi**  
Wireless USB, RS485, RS232 connected base station

## Wireless Output Module Options



**T24-RM1**  
Wireless relay switch output module



**T24-SO**  
Wireless serial ASCII output module



**T24-AO1**  
Wireless 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](http://www.lcmsystems.com/T24)

www.lcmsystems.com

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