smart**link²** Guide

Product Description

smart**link**s are wireless load sensors, manufactured in titanium to be the lightest, strongest and smallest load sensors on the market. Designed in collaboration with leading race teams, smart**link** will help you measure and repeat your fast settings every time.

How it works…

Simply add inline of any 'soft' stay or sheet. Easily connect the sensor to your phone via the latest smartphone app or to marine electronics via optional smart**fittings** gateway for immediate load data.

Correct loading with soft lines

smart**link** is designed to be loaded inline with soft lines/rope/strops, for the most accurate load measurement. If smart**link** is loaded in a bridle configuration the displayed load will be inaccurate.

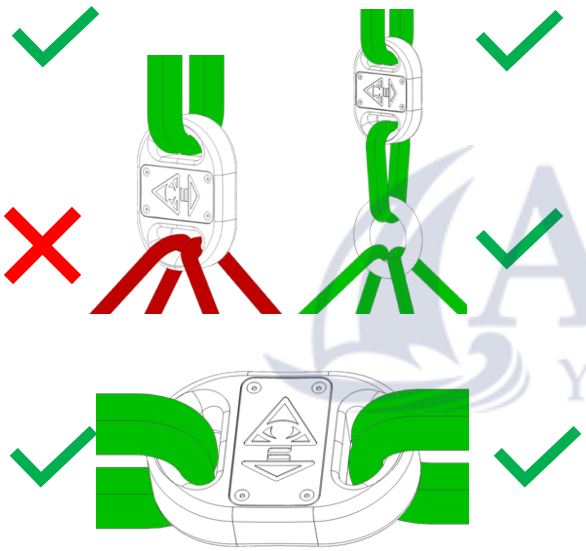


Figure 1 Incorrect and correct strop loading

Use of metal shackles/pins directly on smart**link** is not advised as it may mark the titanium body and could cause permanent damage.

Strops

The strops used for final calibration are built using wound Dyneema cored basket loops, to the below finished diameter. Cyclops Marine recommends using strops built to this diameter to achieve the stated ±1% of maximum working load (MWL) accuracy.

Contact us for pricing and availability of strops.

Model	Nano	2t	5t	10t	20t
Finished Diameter (mm)	4.0	9.0	10.7	12.4	15.0

Safety

Please read all instructions before using smart**link** to measure loads. Always perform a safety evaluation before use to ensure that use of the sensor is not dangerous to nearby people or property.

smart**link** is not intended to support personnel working aloft. Please follow all standard working aloft safety procedures.

Overload

The MWL of a smart**link** must not be exceeded, as this may cause damage to the internal instrumentation and will invalidate the warranty.

SHOCK LOADING (i.e. strop failure) OR OVERLOADING TO 150% OF MWL WILL RESULT IN PERMANENT DAMAGE TO THE SENSOR THAT WILL REQUIRE RECALIBRATION

Calibration

If smart**link** has been under load for a significant length of time, the sensor may take 1-2 minutes to return to zero when the load is removed. This is to be expected.

A significant impact to the body of the sensor can affect the calibration. This would require the device to be returned to Cyclops for inspection and re-calibration.

smart**power** button

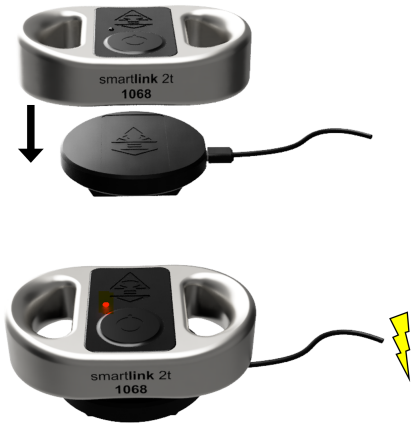
smart**link²** has 3 modes: powered on, extended use & off.

Mode	Powered on	Extended use	Powered off
A quick button press shows	Green flash	Red flash	Red flash
How to activate mode	Long press to green flash	Long press to red flash	Very long press to red flash x2
Frequency	1 Hz	0.25Hz	No data
Ideal for	General usage	Battery saving	Shipping
Battery life	2000 hrs	8000 hrs	2 years

Extended use & powered off modes can only be activated from powered on mode.

Wireless charging

To charge smart**link²** with the wireless charger, plug the charger into a USB port or power plug (not supplied), a quick blue flash indicates it has been powered on. Place the smart**link²** on the charger with the wireless charging logo facing the charger.



The sensor is charging when the LED constantly flashes red.

LED light indication

At <20% charge, LED indications during on and extended use modes will be a double flash.

Technical Data

Model	MWL (tonnes)	Dimensions (mm)	Mass (g)	Accuracy range* (kg)
nano	0.6	64x55x17	80	±6
2t	2	79x55x19	160	±20
5t	5	83x66x22	210	±50
10t	10	93x74x25	360	±100
20t	20	107x88x39	770	±200

*Accuracy range achieved using Cyclops Marine supplied strops.

Frequency	1Hz
Accuracy	±1% of MWL (between -10 to +40°C)
Body Material	Al6082-T6 (600kg), Ti6Al4V (2, 5, 10, 20 tonne)
Housing Material	Acetal, IP67 rated
Battery	Lithium Polymer, 0.925Wh

smart**link**s are not warranted to be accurate for the purposes of buying/selling products by weight.

Displaying Load Data

For both seeing live loads and logging load data from a sailing session, either a mobile phone or a Cyclops Marine Gateway should be used. Scan the applicable QR code below for instructions.

smart**fittings** manager app tutorial:

smart**fittings** gateway installation guide: