



## LOAD MONITORING

## Accessories

Crosby Straightpoint's range of wireless accessories may be used with any Crosby SP wireless loadcells

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## Wireless Overload Alarm Module

Part N°s SP SW-OAM Crosby 2789129

This wireless relay module features audio and visual warning indicators. The set point of the unit can be triggered from a single or summed group of up to four Crosby SP wireless loadcells. It contains two relays (NO and NC). NO is for audio and visual indications, while NC is a spare and can be used to control 230V AC / 30VDC 5A systems.



## Wireless Scoreboard Display

Part N°s SP SW-SD Crosby 2789132

This 100mm or 4" scoreboard LED display is wireless and operates between 100-240V AC. The numerals are viewable for up to 45m or 150ft, making it perfect for installation on a crane gantry. The SW-SD displays an individual load in metric tons or summed load of up to four Crosby Straightpoint wireless devices.



## Wireless Base Station with Analog Output

Part N°s SP SW-BS Crosby 2789314

The SW-BS provides a configurable analog output for any single or summed group of up to 4 loadcells Crosby Straightpoint wireless loadcell and is ideal for integration to a PC, PLC and other data acquisition. Housed in a IP65 enclosure, the output can be selected from current 4-20mA, 2 relay outputs, RS485 ASCII (Configurable) plus an optional CANbus 2.0A or 2.0B output.



## Loadcell Transmitter

Part N°s SP SA700C Crosby 2789097

The SA700C transmitter connects to strain gauge transducers such as loadcells, torque sensors and pressure transducers allowing them to form part of a Crosby Straightpoint wireless system. Load data from the SA700C can be received by multiple receivers that include SW-HHP handheld, INSIGHT software or Crosby SP's range of wireless accessories.



## Wall or Cab Mount Bracket

Part N°s SP SU3282 Crosby 2789228

Constructed from stainless steel and fitted with a viewing angle adjusting mechanism, the SU3282 bracket fits either the HHP or SW-HHP handheld displays. Ideal for wall or cab mounting, leaving the operators to work safely and hands-free.



## External Amplifier

Part N°s SP SA-3420 Crosby 2789096

The SA-3420 external amplifier allows the operator to convert the output of any of the SP cabled loadcell products into a three wire 4-20mA analog output. The weatherproof enclosure is fitted with stainless steel glands and is suitable for connection to a PLC, data logger, or other instrumentation.



## Handheld Rubber Boot

Part N°s SP SU4045 Crosby 2789232

Drop tested to one meter at -30°C, this 70SHA rubber boot is purpose molded to fit and protect the HHP and SW-HHP handheld display against impact, especially when it is used in the harshest industrial environments.



# Handheld Plus



## LOAD MONITORING

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- Displays up to 4 loadcells simultaneously.
- Wireless range 1000m or 3280ft (ATEX 500m or 1640ft).
- Low battery warning.
- Signal strength warning.
- Overload counter.
- User settable 90db audible overload alarm.
- Multiple display units (metric tons, lbs, kg, kN).
- 200Hz peak hold.

The Handheld Plus is a rugged and versatile digital handheld display. It has an extensive range of features and is suitable for all Crosby Straightpoint loadcell products.

At the heart of the ergonomically designed Handheld Plus is a powerful PCB, providing industry-leading features such as user selectable units of measure (metric tons, lbs, kg, and kN), programmable audible overload alarm (HHP & SW-HHP), peak hold, pre-set tare, and a user resettable (HHP & SW-HHP) overload counter.

This crucial overload alarm counter is a requirement for many safety and quality control departments because it keeps track of overload events, allowing the loadcell in question to be removed from service immediately, following the calibration voiding overload event. The loadcell in question can then be sent out for proper testing and, if necessary, recalibration before re-entering service.

The HHP is suitable for connection via cable to any Crosby SP cabled loadcell product and easily adapted to any other manufacturers' loadcell product with a mv/v output.

In addition to the standard HHP the SW-HHP is suitable for connection to any Crosby SP wireless loadcell, has a range of up to 1000m/3280ft (ATEX 500m/1640ft) and is supplied as standard with the Radiolink Plus loadcell.

Part Numbers SP	HHP	SW-HHP	SW-HHP ATEX
Crosby	2789030	2789126	2789442
Battery Type	2 x AA	2 x AA	4 x AA Energizer L91
Battery Life	100 hours continuous	40 hours continuous	40 hours continuous
Display Type	240 x 128 pixel Multi-line dot matrix with backlight		
Operating Temp.	-10°C to +50°C / 14°F to 122°F	-10°C to +50°C / 14°F to 122°F	-10°C to +50°C / 14°F to 122°F
Protection	IP65 / NEMA4X		
Excitation	3.3V	N/A	N/A
Max Sensitivity	3mV/V	N/A	N/A
Range	N/A	1000 m / 3,280 ft	500 m / 1,640 ft
Connectivity	6-way female binder 723 socket	Wireless 2.4GHz	Wireless 2.4GHz

### Accessories available for the handheld:

Wall or cab mount bracket  
Crosby SP part numbers  
SU3282 2789228

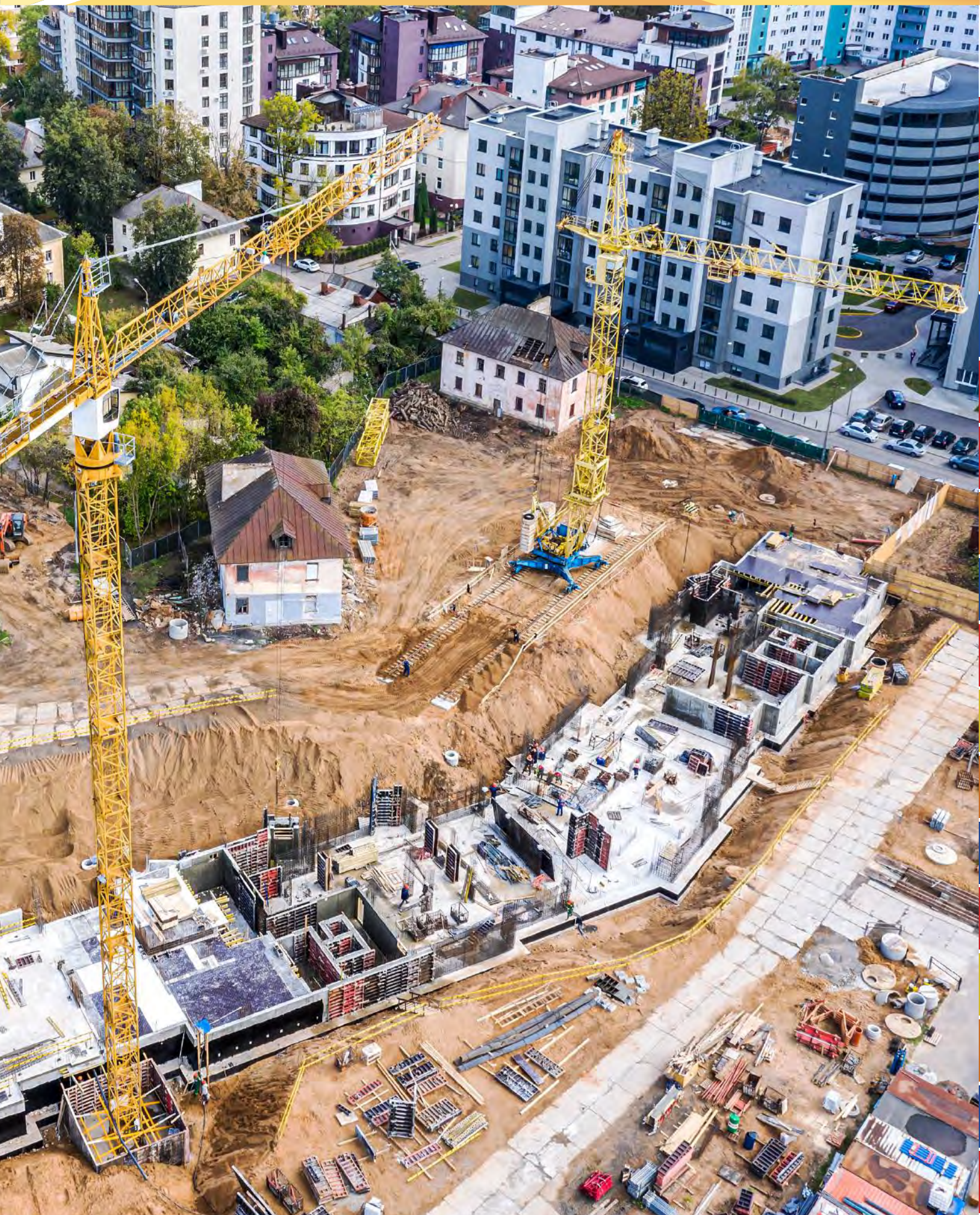
Rugged rubber boot  
Crosby SP part numbers  
SU4045 2789232

Also available with hazardous area approval

**ATEX / IECEx**  
Ex ia II CT4 Ga  
Certification number:  
SW-HHP ATEX  
IECEX SIR 15.0072X  
Sira 15ATEX2196X  
When ordering  
ATEX/IECEX version of  
SW-HHP, order using code:  
SW-HHP-ATEX  
Please note:  
There is no audible alarm with ATEX

Please note:  
There is no audible alarm with ATEX





# BLOKALERT

Improving safety, communication & productivity

# SETTING THE STANDARD IN CELL TOWER SECUREMENT

The Crosby Group offers a wide range of solutions for the cell tower industry. Our products have been put through rigorous testing to ensure optimal functionality and safety ratings.

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**Wire rope clips**  
**Tensionmeters**  
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## LOAD MONITORING

### INSIGHT Software

Numerous proof load testing applications worldwide require a loadcell to verify the load applied. From crane testing, using water bags to pad eye testing, using hydraulic tools, the need to document test procedure and results has never been greater, especially as users of lifting equipment call for more traceability and audit trails.

A proof test is a form of stress test to demonstrate the fitness of a load-bearing structure, and is nominally a non-destructive test. Such a structure is often subjected to loads above that expected in normal use, demonstrating safety and design margin.

This demand has increased so much, Crosby Straightpoint offers a software package designed to connect to any of their wireless loadcells – Proof Test plus.

This impressive package allows the test engineer to wirelessly, at a safe distance, monitor a proof load test and automatically create a pass or fail certificate when testing is complete.

The report is formatted as a PDF, which may then be printed, emailed, or uploaded to the cloud, resulting in a traceable document for both test engineer and end customer.

Typical load tests using Crosby SP loadcells include:

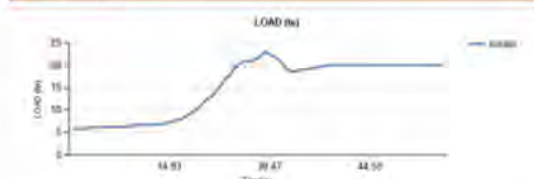
- Bollard pull tests
- Tug tests
- Crane test (water bags, block weights)
- Pad eye or fly point testing
- Crash barrier testing
  - Lifting equipment testing
  - Slings, chains, wire rope, hooks
- Construction equipment testing
  - Shoring columns, acrow props, lintels
- Lifting and spreader beam testing
- Hydraulic cylinder load test
- Supplied with SW-D transmitter



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**Certificate of Load Test - 10 August 2021 11:59:18**

Date of Test:	10 August 2021 11:59:18	Product Description:	Pad Eye
Certification Number:	AL-10001	Serial or Tag No.:	112255
Company:	Bob Friend	WLL:	20t
Address:	Unit 13, Express Way 80031	Test Method:	Pull
Tel:	+909 2543481	Load Test To:	20t
Contact:	bobfriend@company.com	Duration of Test:	54.83 seconds
		Notes:	Max load can reach up to 1101% of WLL



This is to certify that this product described herein has been subjected to the load test.  
Caution: Never exceed the rated capacities.  
Notes: Test accepted.  
Signed: Bob Friend  
Appointed Person: Bob Friend ID: 1134 Eng

This proof test was carried out using a reference load cell that had exceeded the recommended recalibration interval (12 months).

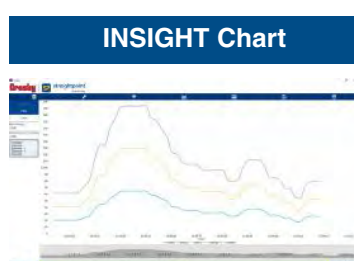
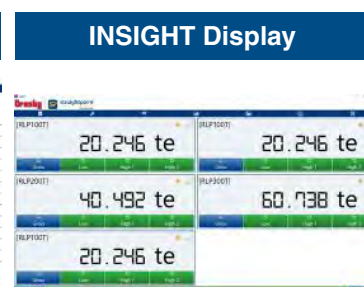
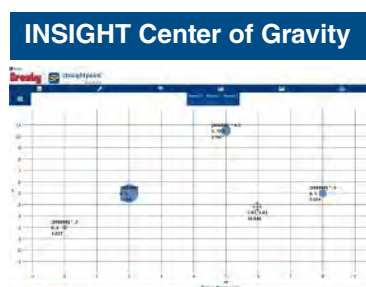


Part Numbers	INSIGHT med SW-D
SP	
Crosby	2789318
IP rating	IP67 / NEMA6
USB Dongle Operating Temp.	-20°C to +70°C / -4°F to 158°F
Licence	Licence free
Frequency	2.4 GHz
Range	700 meters / 2,300 feet
Loadcell Inputs	Up to 126
PC Requirements	Intel i3 processor with 2GB RAM
Operating System	Windows 7 and 10





## INSIGHT Software



INSIGHT software, supplied with an SW-D USB wireless dongle, allows connection of up to 126 Crosby Straightpoint wireless loadcells simultaneously onto any Windows tablet or laptop.

Insight has four main features:

- Multi-channel display and data logging mode**  
 View and log load data from connected loadcells plus totals loads live on screen and directly into a .csv file for later analysis at speeds of up to 200Hz.
- Visualization mode**  
 For complicated lifts import a photo of the lift and drag and drop loadcell displays – make the screen look like the lift.
- Center of gravity mode**  
 Connect to Crosby SP's range of wireless compression loadcells and use this feature to weigh and calculate the center of gravity of large items and structures.
- Proof load testing**  
 Real time graphing of load test and auto generated test certificates.
- Logging at timed intervals, manual or on overload/underload.
- Log data at speeds up to 200Hz.
- Visual and audible alarms indicate overload, underload, low battery, and communications error.
- 100% wireless, no easily damaged cables.
- 700m or 2300ft range allows operator to stand at safe distance from test.
- Connects to any Crosby SP wireless loadcell.
- Automatically creates digitally signed pass or fail certificate.
- Real-time load v time graph display.
- Three weighings per C of G report with averages and statistical analysis to ISO19901.
- Plot loadcell positioning using measurements or GPS coordinates.
- Free extra entry fields for operator, client, wind speed, sea states, and temperature available for reporting.



# LoadConnect Software

LOAD MONITORING



Crosby Straightpoint LoadConnect, connected to BaseStation, is a cloud-based solution to monitor loads and line tensions from any distance and from anywhere in the world. Stay connected, protect assets, reduce site visits, and improve safety.

- Dashboard overview.
- Live load data.
- Error reporting.
- Productivity and utilization graphs.
- Regular email reporting.
- SMS alerts.
- Connect to BOLT to monitor tension on cables.
- Connect to SP loadcells to monitor loads.

# BaseStation

How it works:



Part Numbers SP	BaseStation
Crosby	2789574
Required Power Supply	9 to 28 V DC
Radio Frequency	2.4 GHz (License Free)
Maximum Number of Loadcells	16
Range	Up to 500 meters / 1,640 feet
Operating Temperature Range	-10°C to 50°C / 14°F to 122°F
Backup Battery Life	16 hours
Input Option	1x 4-20mA (2 wire) OR 1x mV/V & Wireless
Weight	2.75 kg / 6.06 lb
Network Supported	4G / 3G
Frequency Band	LTE-TDD B34/B38/B39/B40/B41 LTE-FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/ B18/B19/B20/B25/B26/B28/B66 UMTS/HSPA+ B1/B2/B4/B5/B6/B8/B19
SIM Type	Micro SIM (NOT INCLUDED)
Alert Functionality	via SMS (up to 3 pre defined numbers) Optional subscription to online dashboard
IP Rating	IP67 / NEMA6
Dimension	560 x 260 x 90 mm - Antennas included

Data option to be enabled on the SIM card used for full functionality. User configuration required via free software supplied.



## HHP 2



The app records total loads, weights and lifts. This feature is useful when a particular measurement(s) is required for later referral. Added to this is the option to set the threshold and measure productivity for each load cell and the device it's rigged to, a crane, for instance, for analysis to see shortfalls and improve performance.

A peak facility can be activated to display the highest force measured alongside the live load reading of four load cells simultaneously plus a total load.

Once measurements are recorded to the app using the load monitoring project record and data log feature, the operator can export the details. The report will include load, time and date, GPS coordinates and project information to either a mobile device or send it to a particular email address in csv format.

- Connect up to four loadcells simultaneously.
- Set lift threshold and measure productivity per shift.
- View in eight different languages.
- Overload screen flash.
- Alarm latching.
- Set and record overload incidents
- Up to 100m or 328ft remote monitoring distance.
- Multiple weight unit measurement options (kN, metric tons, kg, lbs, custom unit).
- Peak hold and display value alongside live readings.
- Data-log report.
- Export data-log report.
- Zero and gross monitoring options.
- User defined resolution setup.

Up to four Crosby Straightpoint, Bluetooth load cells can be connected and monitored by up to eight smartphones, with the HHP2 app installed. It will enable more than one lifting professional to monitor the loads progress and safety, spotting potential dangers or issues from different vantage points.

The HHP2 app's simple and easy-to-use interface will enable the operator to use the app with the utmost efficiency. There are five different measurement units to choose from - tonnes, lbs, kN, kg and a custom unit.