

Wireless Wind Alarm System: Construction site & Industry

# WL-410



- Easy Mounting
- Long Range Transmission
- Audible Alarm

- Programmable Relays
- Bluetooth Output for Smartphone

# Introduction

Operating a crane in windy conditions can create a potentially dangerous situation. The wind forces imposed on both the crane and the load can affect the strength and stability of the crane. To ensure everyone's safety during lifting operations, it is imperative that all members of the lifting team know the wind speed and the wind resistance.

The challenge of knowing the wind speed is the connection between sensor and display. Traditional cabled products have limitations. SCI Wireless Anemometers provide solutions ranging from standard display (WR-3), data logger (WL-11) and full-fledged wireless alarm system (WL-410).

SCI Wireless Windspeed Sensors connect to any number and type of displays to keep users informed of equipment safety.

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## Features

- Extremely easy mounting with wireless and magnetic & self-leveling mounting - Long range. Up to 500m
- 4 year sensor battery life
- Integrated alarm & pre-alarm warning lights
- Built-in audible alarm
- 3 programmable alarm relay outputs
- Backlit graphic LCD with large digits
- Bluetooth 4.0 in WL-410XB transmits measured data to Smartphone
- Free app for iOS and Android devices



## Functions

- Real time wind speed & bar graph
- Wind gust & bar graph
- Temperature
- 4 programmable alarm relays with adjustable ON & OFF delay
- Wind speed & alarm history graph in 8 hrs



## Application Areas

- Mobile/Tower/Bridge Cranes
- Lifting Equipment
- Offshore Oil Platform
- Marine
- Aviation Industry
- Agriculture Field



# Models

Model XB features a highly sensitive transceiver to extend transmission range. Also, Bluetooth LE is built in to enable connectivity to a Smartphone. With the YAGI antenna, the range could be extended farther. Model with 4-20 mA output module provides more flexibility for user to build the instrument into the working infrastructure.

	WL-410	WL-410/4-20mA	WL-410XB/ 4-20 mA
4 relays	✓	✓	✓
4-20 mA outputs	-	✓	✓
Smartphone compatibility	-	-	✓
Extended transmission	-	-	✓

## Accessories

- Magnetic receiver mounting assembly
- External antenna with 4 m cable, magnetic mounting (optional)
- YAGI antenna with 3 m cable (optional)
- Outdoor antenna with 3 m cable (optional)

Sensor mounting

- Magnetic self-leveling sensor mounting bracket

Spare parts

- Wind cups



Wind cup



External antenna



Yagi antenna



Magnetic self-leveling sensor mounting bracket

# Technical Specification

Model XB features sensitive transceiver to extend transmission range. Also, Bluetooth LE is built-in to enable connectivity to a Smartphone. With the YAGI antenna, range could be extended farther. Model with 4-20 mA output module provides more flexibility for users to build the instrument into the working infrastructure.

	WL-410	WL-410XB	WL-410XB/4-20mA
Sensor & receiver			
Measurement range	0.6...50.0 m/s		
Unit	m/s, km/h, knots, mph		
Resolution	0.1 m/s		
Accuracy	+/-3%		
Averaging period	Selectable 2 s, 10 s, 30 s		
Operating voltage	12...24 V DC		
Power consumption	300 mA (max.)		
Transmission distance	400 m	1300 m	
Distance with YAGI antenna	1.5...2.4 km	6.5...10.0 km	
Relay contact rating	1 A/12 V DC; 1 A/24 V DC		
Temperature operating range	-25...60° C		
Sensor battery	3.6 V AA Lithium batteries		
Sensor battery life	5 years	3 years	
Audible alarm	85...90 dB		
Antenna input (receiver)	50 ohm, SMA connector		
Output			
Relay	4 x relays, 2 A / 24 V		
Output	-	-	4...20 mA 4 mA=0 m/s 20 mA=10...50 m/s (programmable)
Mechanical			
Bearings	2 x precision stainless steel ball		
Sensor housing	AL/PVC		
Sensor cups (replaceable)	PA (Nylon)		
Receiver housing	ABS, IP65		
Sensor dimension	Height 210 mm, cup-to-cup diameter 120 mm		
Receiver dimension	150 x 80 x 55 mm		
Mounting	Mounts on a pipe with ø20 mm outside diameter		
Bluetooth LE	-	Yes. Range is up to 40 m.	



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