



Extremely Easy Mounting
Long Range Transmission
Audible Alarm
Programmable Relays
Bluetooth<sup>™</sup> Output for Smartphone

# WL-410/XB

Wireless Wind Alarm System: Construction site & Industry



## INTRODUCTION

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

The challenge of knowing the the wind speed is the connection between sensor and display. Traditional cable solution wouldn't work well. Scarlet Wireless Anemometer Series provide elegant solutions ranges from simple display (WR-3), data logger (WL-11) and full-fledged wireless alarming system (WL-410).

The beauty of Scarlet's solution is one sensor, connect to any number & type of displays to notify anyone who cares about the safety. All are wireless.

## APPLICATION AREAS

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



## FEATURES

- Extremely easy mounting due to the essence of wireless and magnetic & self-leveling mounting
- Long range. Up to 500 m (410XB up to 1300 m)
- 4 years sensor battery life.
- Integrated alarm & pre-alarm warning lights
- Build in audible alarm
- 3 programmable alarm relay outputs
- Backlighted graphic LCD with large digits
- Bluetooth<sup>TM</sup> 4.0 in WL-410XB transmit measured data to smartphone. Free app for iOS and Android phone tablet.



## FUNCTIONS

- Real time wind speed & bar graph
- Wind gust in last 2 min & bar graph
- Temperature
- 3 Programmable alarm relays with adjustable ON & OFF delay
- Wind speed & alarm history graph in 8 hr



Model XB is with high sensitivity transceiver to extend transmission range. Also, Bluetooth LE was built-in to enable the connectivity to Smartphone. With YAGI antenna, the range could be extended further. Model with 4-20 mA output module provide more flexibility for user to build the instrument into the working infrastructure

	WL-410	WL-410/4-20 mA	WL-410XB	WL-410XB/4-20 mA
3 relays	~	√	√	√
4-20 mA output	-	√	-	$\checkmark$
Smartphone compatibility	-	-	~	$\checkmark$
eXtended transmission	-	-	√	√

#### Accesseries

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

#### Sensor mounting

- Self leveling mounting assembly
- Magnetic self leveling mounting assembly
- Magnetic mounting assembly

#### Spare parts

• Anemometer cups





## PARTS

### MODELS

## TECHNICAL SPECIFICATION

	WL-410	WL-410/ 4-20mA	WL-410XB	WL-410XB/ 4-20mA		
Sensor & receiver						
Measurement range	0.650.0 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	1224 V DC					
Power consumption	300 mA (max.)					
Transmission distance	300 m		1300 m			
Distance with YAGI antenna	1.52.4 km		6.5…10.0 km			
Relay contact rating	1 A/12 V DC; 1 A/24 V DC					
Temperature operating range	-2560° C					
Sensor battery	3.6 V AA Lithium batteries					
Sensor battery life	5 years		3 years			
Audible alarm	8590 dB					
Antenna input (receiver)	50 ohm, SMA connector					
Output						
Relay	3 x relays, 2 A / 24 V					
Output	-	420 mA 4 mA=0 m/s 20 mA=1050 m/s (programmable)	-	420 mA 4 mA=0 m/s 20 mA=1050 m/s (programmable)		
Mechanical						
Bearings	2 x precision stainless steel ball bearing					
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 ř20 mm outside diameter					
Bluetooth LE		- Yes. Range is up to 30 m.				



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