



SCARLET | TECH

Innovative wind speed & direction logging system

# WL-11



- Wind Speed & Direction in One Sensor
- Wireless. No Running Cable
- Logging Data to SD Card Automatically

- 4 Years Sensor Battery Life
- Adjustable logging interval

# 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 standard display (WR-3), data logger (WL-11), 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.

# Features

- Easy-to-use solution for wind site evaluation
- Transmission
- Range up to 400m/1300m (WL-11X)
- Easy installation without running cables
- Replaceable anemometer cups
- UP to 4 years sensor battery life

# Application Areas

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



# Accessory & Parts (Optional)



External antenna



External antenna



Wind cup



Receiver Holder



Sensor mounting bracket

# Technical Specification

## Sensor

Wind speed sensor	Range: 0.1...50 m/s
	Resolution: 0.1 m/s
	Accuracy: typ. +/-2%
	Unit: m/s, km/h, knots, mph
Wind direction sensor	Range: 0...359° no blank sector
	Resolution: 1°
	Accuracy: +/- 2°
Temperature sensor	Range: -30...60 °C
	Resolution 1 °C
	Accuracy: 1 °C

## Logging

Logged parameters	Average wind speed
	Maximum wind speed
	Average temperature
	Average wind direction
Logging interval	Configurable 10 s / 1 min / 10 min / 60 min
File creation on SD card	Create new file every day at 10 s logging interval
	Create new file every month at 1 min / 10 min / 60 min logging interval
	Create new file after each insertion of SD card
	Create new file after each settings changes
Data format	.txt
Memory card	Micro SD (8GB included)
Data transmission	Every 2 seconds

## Mechanical

Sensor bearings	2 x precision stainless steel ball bearings
Receiver housing	ABS
Receiver dimension	94 x 63 x 28 mm
Sensor housing	Anodized aluminum & PVC
Sensor - cups	PA (polyamide)
Sensor dimension	290 (H) x 120 mm (cup-to-cup diameter)
Mounting	Sensor mounts on ø20 mm pipe

## RF & battery

	WL-11	WL-11X
RF frequency	868 MHz (optional 908 MHz)	
Data rate	every 2 seconds	
Range	Up to 400 m in open space	Up to 1300 m in open space
Sensor battery	1x 3.6 V AA Lithium battery (included), replaceable	
Receiver battery	2 x 1.5 V AA batteries (not included), replaceable	
Sensor battery life	4 years	3 years
Receiver battery life	12 months, up to 6 months with both sensors	



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