

ALL-NEW 2021



SCARLET | TECH

# WR-3 PLUS

*A Wireless Anemometer You Can Trust*



**MAX 500 meters**

Ultra-Long Wireless Transmission

- Max 500m Ultra-Long Wireless Transceiver
- Audible & Visual Wind Speed Alarm
- Data Recording Up To 1 Year
- Wind Speed, Temp, Air Pressure Sensors
- Hourly Reports & Historical Graphs
- Impact Resistant & Easy to Install

# Introduction

Cranes operation in windy conditions could create a potentially dangerous situation. The wind forces exerted on both the crane and the load can affect the strength and stability of the cranes. In order to ensure safety during lifting operations, it is very important for the members in the lifting team to know the wind speed and resistance.

The challenge to know the wind speed is the connection between sensor and display. Traditional cabled-anemometer wouldn't work well with the staggering heights among cranes and complex working condition. WR-3 Plus Wireless Anemometer offers a trusted and stable wind measurement solution.

# Features

- Max 500m ultra-long wireless transceiver
- Audible & visual wind speed alarm
- Data recording up to 1 year
- Wind speed, temperature, air pressure measurements
- Max 3 years sensor battery life
- IP67 waterproof & impact resistant
- Fast & secure magnetic installation kit

# Application Areas

- Cranes & Construction
- Marine, Ports & Offshore
- Film Production & Outdoor Entertainment
- Scaffolding & Temporary Structure
- Rigging & Communications Industry
- Wind Farm & Turbine



# Functions

## Instant Wind Speed Alarm

WR-3 Plus displays the live wind speed value in selectable measurement units (m/s, knots, MPH, km/hr) Users can set a wind speed warning limit on based on local operation safety standards. An audible and visual alarm will be triggered when the limit has been reached. Each sensor has a unique wireless address that can connect to several displays to notify multiple stakeholders on-site.



## Data Recording

WR-3 Plus captures and stores wind speed, temperature, and air pressure measurements.

64MB built-in memory and outstanding battery life supports up to 1 year of continuous data recording. (based on 10s logging interval, adjustable: 2s, 5s, 10s, 1min, 5 mins, 10 mins, 60 mins)

The recorded data can be easily exported in Excel format for further analysis.

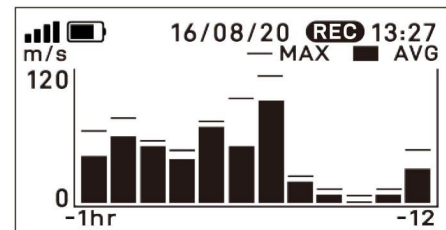
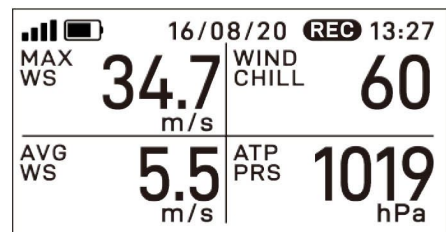
	A	B	C	D	E
1	Date	Time	Wind Speed	Temperature	Atmospheric Pressure
2	22/02/21	16:28:00	3.7	23.7	1011
3	22/02/21	16:29:00	0.9	23.9	1013
4	22/02/21	16:30:00	2.5	24.1	1012
5	22/02/21	16:31:00	5.6	26.7	1011
6	22/02/21	16:32:00	5.2	25.2	1011
7	22/02/21	16:33:00	4.6	23.3	1012
8	22/02/21	16:34:00	4.0	24.7	1013
9	22/02/21	16:35:00	3.2	25.6	1011
10	22/02/21	16:36:00	6.7	26.9	1012
11	22/02/21	16:37:00	2.5	27.6	1013
12	22/02/21	16:38:00	2.7	22.3	1011
13	22/02/21	16:39:00	2.0	23.2	1012
14	22/02/21	16:40:00	1.7	24.1	1012
15	22/02/21	16:41:00	0.0	21.4	1012
16	22/02/21	16:42:00	0.0	28.5	1011



## Graphical Display

The large LCD backlit display with user-friendly interface clearly indicates live weather data in various units of measurement. Users can view hourly wind records and historical bar charts from the past 12 hours on different pages.

- Live Wind Speed
- Average Wind Speed (selectable averaging)
- Maximum Wind Speed
- Ambient Temperature
- Beaufort Bar Graph
- Wind Chill
- Atmospheric Pressure



m/s	AVG	MAX	TEMP °C
-01 hr	5.6	10.3	20.1
-02 hr	5.2	10.9	21.4
-03 hr	3.6	12.2	19.7
-04 hr	6.7	16.7	18.6
-05 hr	1.4	13.3	22.9



# Technical Specifications

## Wireless Sensor

Frequency	868MHz(default), 915MHz
Distance	Max 500m* (depends on the applied environment)
Data Rate	Every 2 seconds
Power Supply	3.6V 18505 Lithium battery x1
Waterproof Rating	IP67
Weight	406g
Dimension	262.5 x 183.5 x 32mm

## Receiver Datalogger

Receiver Buzzer	> 80dB
Built-in Memory	64MB
Output	.xlsx, .xls
Data Logger	wind speed, temperature, atmospheric pressure
Logging Interval	2s, 5s, 10s, 1min, 5 mins, 10 mins, 60 mins
Power Supply	1.5V AA battery x3, Micro USB port
Dimension	189.6 x 75.6 x 36.3mm
Weight	205g

## Wind Speed Sensor

Unit	m/s knots MPH km/hr
Range	0.3...50 m/s
Resolution	0.1 m/s 0.1 knots 0.1 MPH 0.1 km/hr
Accuracy	±2% FS

## Temperature Sensor

Unit	°C °F
Range	-30°C...60°C
Resolution	0.1°C 0.1°F
Accuracy	±1°C

## Atmospheric Pressure Sensor

Unit	hPa mmHg bar
Range	500...1100 hPa
Resolution	1 hPa 0.1 mmHg 0.001 bar
Accuracy	±4 hPa



Receiver

Wireless Sensor

# Package List

- Wireless Sensor
- Wind Cups
- Receiver
- Receiver Antenna
- Receiver Holder
- Adhesive Metal Flakes x 3 (for Receiver Holder installation)
- AA Battery x 3 (for Receiver)
- 3.6V 18505 Lithium Battery x1 (placed in Sensor)
- User Manual & Certificate



Wireless Sensor



Wind Cups



Receiver



Receiver Antenna



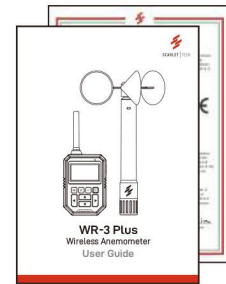
Receiver Holder



AA Battery x 3  
(for Receiver)



3.6V 18505  
Lithium Battery x1  
(placed in Sensor)



User Manual & Certificate

# Optional Accessories & Spare Parts

- Magnetic Sensor Mounting Bracket
- Spare Wind Cups
- External Antenna
- Spare Sensor Battery (3.6V 18505 Lithium battery)
- Receiver



Wind Cups



3.6V 18505 Lithium Battery x1  
(placed in Sensor)



Magnetic Sensor  
Mounting Bracket



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