### ALL-NEW 2021

# WR-3 PLUS





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> 16/08/20 GED 18: ALARM:45

SCARLET TEC

19.0 36

### MAX 500 meters

Ultra-Long Wireless Transmission

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- Max 500m Ultra-Long Wireless Transceiver
- Audible & Visual Wind Speed Alarm
- Data Recording Up To 1 Year

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- 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 trigger 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 capture and storage wind speed, temperature, 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 export in Excel format further analysis.

-					
1	A	В	С	D	E
2	Date	Time	Wind Speed	Temperature	Atmospheric Pressure
3	22/02/21	16:28:00	3.7	23.7	1011
4	22/02/21	16:29:00	0.9	23.9	1013
5	22/02/21	16:30:00	2.5	24.1	1012
6	22/02/21	16:31:00	5.6	26.7	1011
7	22/02/21	16:32:00	5.2	25.2	1011
8	22/02/21	16:33:00	4.6	23.3	1012
9	22/02/21	16:34:00	4.0	24.7	1013
10	22/02/21	16:35:00	3.2	25.6	1011
11	22/02/21	16:36:00	6.7	26.9	1012
12	22/02/21	16:37:00	2.5	27.6	1013
13	22/02/21	16:38:00	2.7	22.3	1011
14	22/02/21	16:39:00	2.0	23.2	1012
15	22/02/21	16:40:00	1.7	24.1	1012
16	22/02/21	16:41:00	0.0	21.4	1012
17	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





	14/0	19/20	<b>REC</b> 13:	27
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	$\mathbf{v}$

# **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 x32mm	

### **Receiver Datalogger**

Receiver Buzzer	> 80dB	
Built-in Memory	Built-in Memory 64MB	
Output	.xlxs, .xls	
Data Logger	wind speed, temperature, atmospheric pressure	
Logging Interval2s, 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

	m/s
Unit	knots
onit	MPH
	km/hr
Range	0.350 m/s
	0.1 m/s
Resolution	0.1 knots
Resolution	0.1 MPH
	0.1 km/hr
Accuracy	±2% FS

### **Temperature Sensor**

Unit	°C °F
Range	-30°C60°C
Resolution	0.1°C
Resolution	0.1°F
Accuracy	±1°C

### **Atmospheric Pressure Sensor**

	hPa
Unit	mmHg
	bar
Range	5001100 hPa
	1 hPa
Resolution	0.1 mmHg
	0.001 bar
Accuracy	±4 hPa



# 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



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







Magnetic Sensor Mounting Bracket



3.6V 18505 Lithium Battery x1 (placed in Sensor)



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version 210324