



SCARLET | TECH

Innovative wind speed & direction logging system

# WL-21



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

- Wind Speed, Direction, Temp, Air Pressure
- Hourly Reports & Historical Graphs
- Impact Resistant & Easy to Install

# Features

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



# Functions

## Instant Wind Speed Alarm

WL-21 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

WL-21 capture and storage wind speed, wind direction, 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.

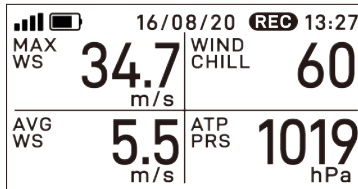
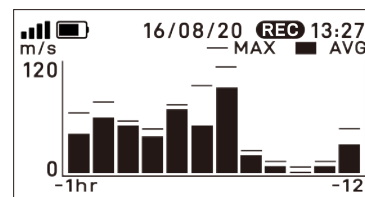
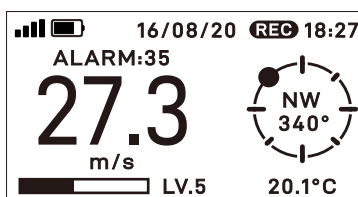
1	A	B	C	D	E
2	Date	Time	Wind Speed	Temperature	Atmospheric Pressure
3	22/02/21	16:28:00	3.7	23.7	1011
4	22/02/21	16:29:00	0.9	23.9	1013
5	22/02/21	16:30:00	2.5	24.1	1012
6	22/02/21	16:31:00	5.6	26.7	1011
7	22/02/21	16:32:00	5.2	25.2	1011
8	22/02/21	16:33:00	4.6	23.3	1012
9	22/02/21	16:34:00	4.0	24.7	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
- Wind Direction (Degrees & Compass rose)



	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
Sensor bearings	2 x precision stainless steel ball bearings
Waterproof Rating	IP67
Weight	406g
Dimension	262.5 x 183.5 x 32mm

## Wind Direction Sensor

Range	0-359° no blank sector
Resolution	1°
Accuracy	+/- 2°

## Receiver Datalogger

Receiver Buzzer	> 80dB
Built-in Memory	64MB
Output	.xlsx, .xls
Data Logger	Wind speed, Wind direction, Temperature, Barometric 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



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