

2023 ALL NEW

Industrial IoT-Ready Wind Alarm & Control System



SCARLET | TECH

WindPro



Wireless Range
up to 1000m



24/7
Data Logging



4 Configurable
Alarms



Various IIOT
Integration Options

- Max 1,000M wireless long range
- Touchscreen with 2-sensor channels
- Industrial IoT Devices Control

- 4 Levels Safety Alert
- Data Recording
- Mobile APP & PC Utility

| Features

- Max 1,000M wireless range
- Large full-color touchscreen
- 2-sensor channels for live monitoring and alert
- 4-level configurable alarm with built-in buzzer
- Data recording
- Shows wind speed (live/average/maximum), wind direction, temperature, wind chill, Beaufort scale, air pressure
- Various outputs for IIoT integration (Relay, 4-20mA, RS232, RJ45, Wi-Fi, Bluetooth, USB)
- RS232 PC Utility & Bluetooth Mobile App

| Industrial-Grade Wireless Sensor

Professional wind tunnel lab calibrated to fit industrial standard.
Maintenance free. Reliable for the toughest working environment.

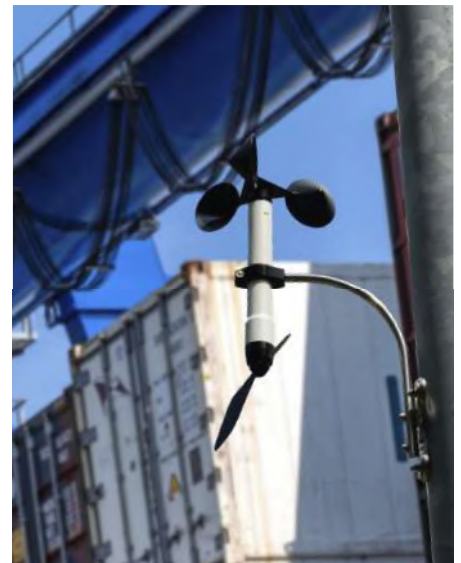
Long Wireless Range: Max 1,000 meters

Sensors: Wind speed, Wind direction, Air temperature, Air pressure

Battery Power: Max 3 years of operation

Waterproof: IP67 certified

Multiple display connection: WindPro consoles & WL-21 portable displays



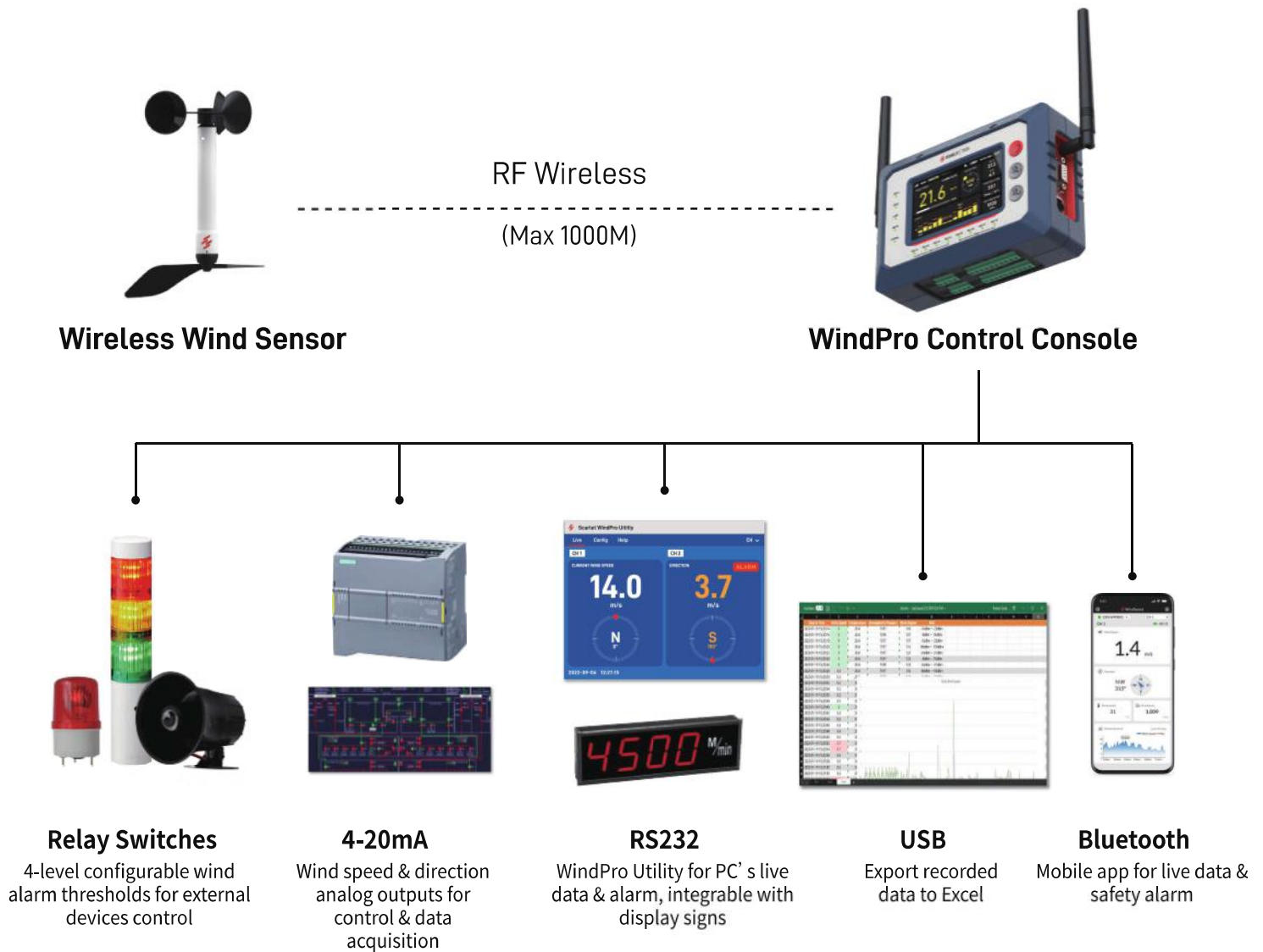
| All-in-One Touch Console

Full-color backlit touchscreen monitor with with a sleek, user-friendly interface. Access all the essential wind data in various units, right at your fingertips.

- Wind Speed (Live, Maximum, Average)
- Wind Direction
- Hourly Wind Graph (Past 12 Hours)
- Ambient Temperature
- Beaufort Scale
- Wind Chill
- Atmospheric Pressure



Industrial IoT Integration



Safety Warning & Control

Set up to 4 alerts per wind sensor channel with WindPro Console. Get notified with visual and audible alarms or external devices connected to the outputs.

- **Alarm Types:** Wind speed/ Wind direction/ Connection
- **Thresholds:** 4 for each sensor
- **Devices control:** Single relay /Multiple relays
- **Configurable:** Alarm duration/ Response time/ Threshold invert

Dual Sensor Channels

WindPro Console can connected with 2 wireless sensors at the same time for live monitoring, data recording, alert, and devices integration.

Capable sensor types:

- **WL-21** Wind Speed & Wind Direction Sensor
- **WR-3 Plus** Wind Speed Sensor



| Data Recording

History logs can be directly export to Excel via ScarletWind software for detailed analysis, making it easy to evaluate important information when you need it most. Users can opt-in for Web Portal for unlimited cloud back up and advanced graphic/chart for analysis.

- **Memory:** 64MB each sensor channel
- **Data Format:** Excel
- **Recorded Data:** Timestamp, wind speed, wind direction, air temperature, air pressure.



| Bluetooth Mobile App

With WindSmart mobile app, multiple users can acquire live wind data and instant safety notification from individual smart devices at the same time.



| RS232 PC Utility

Access readouts and alert directly on your PC via Scarlet's WindPro Utility. RS232 direct connection ensure reliable monitoring with internet connection.



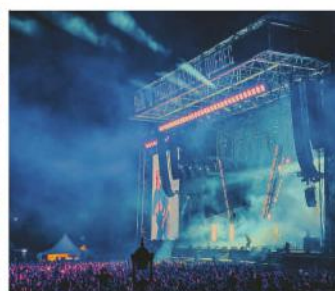
| Applications



Cranes & Construction



Ports, Terminals & Marine



Entertainment



Renewable Energy

Compare WindPro models



WindPro



WindPro Online

Wireless Monitoring		
Max 1km Sensor to Console	✓	✓
Bluetooth Mobile App	✓	✓
Worldwide Remote Access	-	✓
Custom Safety Wind Alerts		
4-Level Alert Thresholds	✓	✓
Console Buzzer Alarm	✓	✓
External Devices Integration	✓	✓
Unlimited Custom Remote Alerts	-	✓
Remote Email Alert	-	✓
Remote Browser Alarm	-	✓
Data Recording		
128MB Built-in Memory	✓	✓
Data Export in Excel	✓	✓
Unlimited Cloud Storage	-	✓
Historical Chart/Graph	-	✓
Multiple Devices Monitoring		
Dual-Sensors Liveview Channels	✓	✓
Access Multiple Consoles/ Sensors Data Remotely	-	✓
Remote Devices Status Access	-	✓

Technical Specifications

WindPro Control Console

Display	Touchscreen LCD 4.3" (480 x 272)
Data	Live/avg/max wind speed
	Wind direction
	Ambient Temperature
	Wind Chill
	Beaufort Scale
	Air Pressure
Buzzer Alarm	> 110dB
Alarm Thresholds	Wind speed x3, Wind direction x1 (each channel)
Build-in Memory	128MB
Recording Interval	Every 2 seconds
Data logger	Wind speed, wind direction, air temperature, air pressure
Wireless Technology	Sensor: 868 / 915 / 933 MHz (Up to 1000m in open space)
	Internet: Wi-Fi 802.11 b/g/n
	Mobile APP: Bluetooth
Outputs	RJ45 x1
	RS232 x1
	USB type C x 1 (for log download)
	4-20mA x 4 (wind speed & wind direction for each channel)
	Relays x 4 (for each channel)
	VCC GND (DC 24V) x 2
Power Supply	AC 100-240V (Power adaptor)
Dimension	185 x 126 x 65mm
Weight	700g



Wireless Wind Speed & Direction Sensor

Power Supply	3.6V 18505 Lithium battery x1 (up to 3 years)
Data Rate	Every 2 seconds
Waterproof Rating	IP67
Installation	Magnetic sensor bracket
Dimension	262.5 x 183.5 x32mm
Weight	406g

Wind Speed Sensor

Accuracy	±2% full scale
Range	0.3...50 m/s
Unit	m/s, knots, MPH, km/hr, ft/s
Resolution	1 m/s
	1 knots
	0.1 MPH
	0.1 km/hr
	0.1 ft/s

Wind Direction Sensor

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

Ambient Temperature Sensor

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

Atmospheric Pressure

Range	500...1100 hPa
Accuracy	±0.4 hPa
Unit	hPa, Atm, mmHg, bar, Pa, inHg
Resolution	1 hPa
	0.001 Atm
	0.01 mmHg
	0.001 bar
	100 Pa
	0.01 inHg



Package Content

- WL-21 Wireless Sensor (Wind Speed & Wind Direction)
- 3.6V 18505 Lithium Battery x1 (placed in Sensor)
- Magnetic Sensor Mounting Bracket x1
- WindPro Control Console x1
- Receiver Antennas x 2
- Power Adapter (100-240V, 50/60Hz, 1.5A)
- Receiver Holder Kit x1
- User Manual & Certificate of Conformity



Optional Accessories

- Scarlet Web Portal Access
- WR-3 Plus Wireless Sensor (Wind Speed)
- WL-21 Wireless Sensor (Wind Speed & Wind Direction)
- WindPro Control Console
- WR-3 Plus Wireless Receiver
- WL-21 Wireless Receiver
- LED Stack Light With Siren
- Spare Wind Cups
- Spare Sensor Battery



Web Portal Access



Wireless
Wind Speed & Wind Direction
Sensor



Wireless
Wind Speed
Sensor



WL-21
Wireless Receiver



Spare Wind Cups



Spare Sensor
Battery



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4F-3, No. 347 , HePing E Rd, 2nd Sec, DaAn District, Taipei City 106, Taiwan
info@scarlet.com.tw
www.scarlet-tech.com

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