



OBSERVATOR
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SYNCHROFAC
EXTREME WIND SENSORS & SYSTEMS

HIGH-WIND ALARM FOR PORT OPERATIONS PRODUCT DESCRIPTION



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High-Wind Alarm Product Description

Version 1.01 – July 2017
Author: Observator Instruments



Document History

Paper copies are valid only on the day they are printed. Contact Observator Instruments if any doubt about the accuracy of this document.

Revision History

This document has been revised by:

Revision Number	Revision Date	Summary of Changes	Author
V1.01	31-07-17	Updated general content	Ludovic Grosjean

Reference Documents

Please see the following documents for more information:

Document Name	Download from	Author
Manuals	http://download.observator.com/files/?dir=User manuals	Ludovic Grosjean

Distribution list

This document has been distributed to:

Name	Company, Position	Action
Dana Galbraith	Director at Observator Instruments	Review
Niran Pelpola	Manager at Observator Instruments	Update

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1. INTRODUCTION

This document is a Product Description which provides a list of options and capabilities for our High-Wind Alarm Systems.

Observer Instruments has long history of manufacturing and supplying wind and weather systems to the Maritime Industry.

Observer instruments is a systems integrator and product development specialist, so we are well suited to meet a myriad of custom system requirements.

Wind alarm systems can be configured many different ways but in most scenarios we have found that a low voltage wireless system offers the most flexibility and are easy to install by local electrical contractors or the end user.

For safety and mission critical applications a logger with remote telemetry is advisable for off-site alarms or monitoring.

Please contact Observer Instruments for a complete set of options and available accessories for your system.





2. APPLICATIONS

High-Wind Alarm typical use include applications such as:

1. **Container Logistics Yards**
2. **Container Off-loading Yards**
3. **Industrial Controls**
4. **Crane Operations**
5. **Chemical and Bulk Handling**
6. **Airports**
7. **Irrigation Controls**





3. OPTIONS & ACCESSORIES

Sensor Choices

- Compact Mechanical (SYN-710)
- Compact Ultrasonic (Gill Windsonic)
- High-spec Ultrasonic
- Ruggedized Mechanical (SYN-706)
- A-Tex Explosion proof (OMC-150)





Communication Choices

- Radio-link – up to 10Km (line of sight)
- GPRS
- Wifi
- Lan
- Satellite



Logging Choices

- Simple SD Logger
- Complex GPRS Telemetry logger OMC-45-III





Display Choices

- LCD (WS-15)



- LED Small (SYN-96)



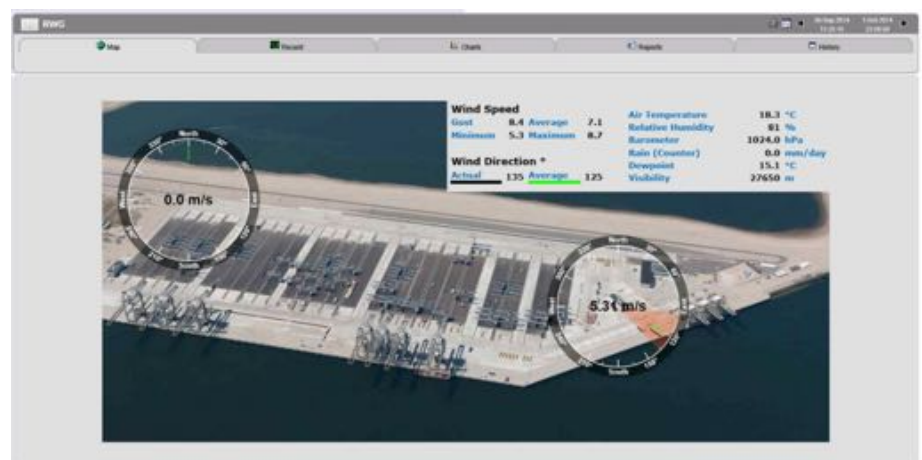
- LED Large (OMC-138)



- Local PC



- Web Visualization

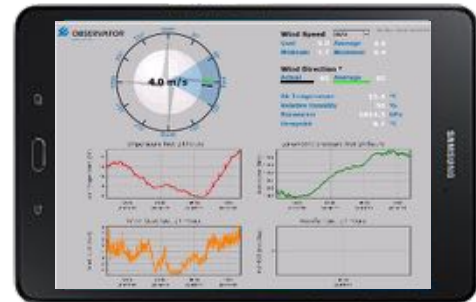




- Touch screen Display (OMC-140)



- Tablet/Android App





Alarm Choices

- Visual
- Audible
- Text
- E-Mail
- Combination



Alarm Settings

- Wind-speed (m/s, knots, mph, km/h and Beaufort)
- Wind direction
- Wind-speed & Wind direction (combination)
- Multi-levels Alarms (low, medium and high)

Enclosures

- Indoors
- Outdoors
- Custom mounting solutions



Power supply

- Mains Power
- Battery backup
- Solar recharge





4. TYPICAL SYSTEM

A typical system entails the following components:

A. A wind sensor and transmitter radio located remotely in a site location that exhibits high-wind characteristics



1. Sensor should be mounted with North marking facing North
2. Radio should be mounted considering line of sight to the receiver radio
3. Sensor should be mounted at a high point with minimum wind obstruction. If mounted on a light pole, consideration should be taken to place sensor so obstruction is in the lowest wind direction.
4. A bracket can be fabricated using UNI-STRUT™ to place mounted assembly away from pole.
5. A 240V mains to 24V transformer (DIN Style) is placed at the base of the pole in an appropriate location.
6. Two element Power and Ground cable/wire can be routed with conduit up to terminal box at sensor for easy connection.

B. A receiver radio to be mounted in line of sight to the transmitter on the roof of the office that will contain the display enclosure.



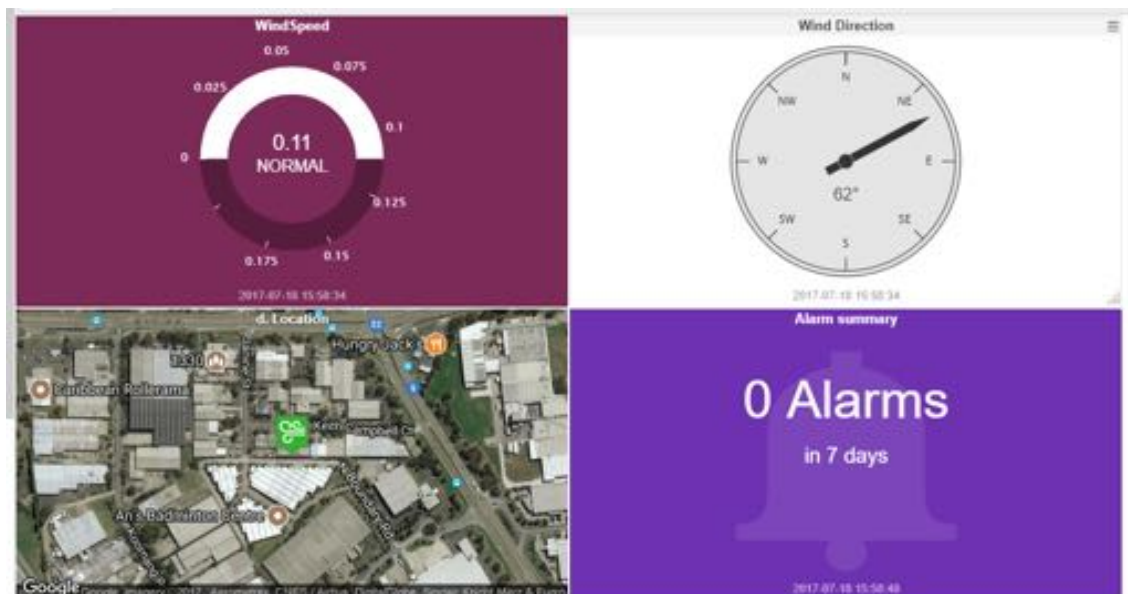
1. Receiver Radio supplied with 10 meters of cable to reach enclosure.
2. Receiver radio is supplied with a bracket plate and hardware which can be attached to pre-fabricated UNI-STRUT™ bracket or a safety rail.
3. Receivers with an RS-422 can accommodate 1000 meters of cable to the enclosure.
4. Receiver Radio location must maintain line of sight position to the transmitter.
5. Consideration must be made to temporary obstructions.



- C. An enclosure is supplied containing a visible display of wind speed/direction. It contains a power supply and any other specified options to suit the task. Generally, a visible flashing beacon indicates an alarm condition.



1. Enclosure is supplied with a power point plug so placement considerations have visibility and access to power.
2. Loggers offer access to forensic wind information saved on an SD card. The logger has software supplied to extract SD card.
3. Alarms can be visible and audible in a number of colors. Multiple alarm levels can be requested.
4. SMS alarms limited to 2 phone numbers and requires a 3G SIM card.
5. Data can be sent via GPRS to a remote data server for storage or for use with an on-line service for alarms and visualization.





5. CONTACT INFORMATION

Contact & more information

Additional Information, including training video, this manual up-to-date and tutorials are available on our training page:

<http://download.observator.com/files/?dir=User manuals>



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