# *WIND SPEED SENSOR ALARM AUTO SYSTEM*

## Wind Alarm - 12VDC


**Our dual set point Wind Alarm provides both warning for and control of wind-sensitive equipment such as our Turbomisters. Can be used to alert you to high or low wind speeds and can be factory calibrated in MPH, km/h or Knots.**

**To operate, set the thumb-wheel switches to your desired levels. When wind speed achieves or exceeds the first setting, a yellow warning light illuminates and one internal SPDT relay activates. When wind speed achieves or exceeds the second setting, a red light illuminates, a 85dB (at 30cm) piezo buzzer sounds, and the second internal SPDT relay is activated.**

**Wind Alarm is housed in a 6.3"H x 4.72"W x 3.29"D weather tight polycarbonate case and utilizes a non micro-processor circuit to minimize occurrence of latch-up. It is accurate to +/- 2 MPH and operates on 12 volts DC, with an AC adaptor available as an option.**

**Wind Alarm is shipped complete with sensor, cable, stub-mast and mounting hardware.**

**Features:**

LED digital readout with 5/8" digits
Dual set points (2 alarms) 0-99 MPH
Warning level: yellow
Control level: red, with 85dB SPL (piezo buzzer)
Can be set to monitor high or low wind speeds
2 Relay outputs to operate external devices
One SPDT relay for each set point
Non micro-processor circuit to minimize occurence of latch-up
NEMA Type 4X weather-tight polycarbonate case with clear cover
Power and sensor cables enter through bottom
Internal screw aperatures for surface mounting

Specifications:

| | |
|---|---|
| Measurement Range: | 0-99 MPH in 1 MPH increments |
| Accuracy: | +/-2 MPH of input and +/-1 digit |
| Sample Rate: | 3 seconds |
| Relays: | Two SPDT relays (rated at 5A at 30VDC) |
| Dimensions: | 6.30" H x 4.72" W x 3.29" D |
| Operating Temperature: | 32°-120° F (0°-50° C) |
| Power: | 9-12VDC (110VAC optional) |
| Current Draw: | 300mA |

http://www.maximum-commercial.com/wind-alarm-12vdc.htm

Drift issues – see below

# HIGH WINDS AND DRIFT ISSUES?

Turbomist Evaporator systems can have wind speed sensors added that will automatically shut down a submersible pump when threshold wind speed is reached (adjustable by client) and restart when wind speed drops below that threshold.

The system is designed to have a delay to compensate for gusts, meaning if for example 15 kms per hour is the Threshold chosen, the unit could be set to require that speed to be maintained for 2 minutes before the unit would be shut down, then would require the wind to remain below the threshold for the same 2 minutes before restarting.

In situations where shore mounted multistage vertical centrifugal pumps are used, we would chose to divert the flow back to the pond during the high wind incident, rather than shut down the pump, this is because the risk of a dry start due to loss of prime is considerable in this style of pump as opposed to the submersible style where prime is not an issue. This diversion is done by using a stainless steel electric ball valve on the pressure line to the nozzle ring.

If you feel you may have concerns with drift of solids outside of your lined pond area, we would recommend you consider installing what we call a salt fence. See information under **Salt fences**.

## ***COMPLETE WEATHER STATIONS ARE AVAILABLE***

Wind speed , wind direction, Humidity, temperature, wet bulb, water level (rainfall less evaporation) can be measured and recorded to your laptop if desired.