



## Wireless Wind Speed System (Sensor & In-Cab Display)



### Introduction

The wireless wind speed display (T24-DWS) is a surface mounting display module for exclusive use with the wireless wind speed transmitter module (T24-WSSp). This complete wireless wind speed system provides high accuracy measurement and offers a quick and effective solution for monitoring wind speeds in a wide variety of applications and industries, particularly suited to the lifting and handling industry.

The T24-WSSp, is designed for mounting to moving booms, with a pivot design to ensure the sensor remains upright. It uses a low power mode between transmissions to maximise battery life in the field whilst offering class leading wireless coverage range of up to 800 metres (2,600 ft). The display module is externally powered and comes complete with 3m cable and ball jointed cab mount/wall mount.

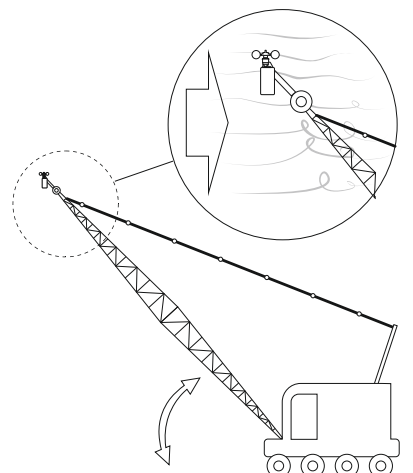
The T24-WSSp features a high quality 3-cup rotor anemometer providing measurements in m/s and mph. Forming part of the T24 modular telemetry system, the data transmitted by the T24-WSSp can be received by multiple T24 displays as well as analogue outputs, relay modules and computer interfaces.

The in-cab display shows a rolling average wind speed which is updated at the transmission rate of the wind speed sensor, (which has a default of once per second). The display, which has an optional backlight, can be toggled between m/s and mph and an alarm limit can be configured to activate an internal relay and buzzer to control external equipment. Measuring wind speeds between 5 mph to 125 mph the T24-WSSp is powered from internal D Cell batteries.

The system is supplied pre-calibrated with the sensor 'paired' to the display making it a simple and easy out-of-the-box solution. Additional configuration is also available, if required with the use of a T24 base station.

### Product Features & Benefits

- Pivot design for mounting to moving booms
- High accuracy measurement
- Low power mode providing exceptional battery life in excess of 12 months
- Quick and easy installation
- Constantly monitors average wind speed with permanent power to the display
- In-built buzzer and relay feature provides alarm function to control external equipment
- Backlight display for low light conditions
- Durable plug and measure device
- Class leading wireless range up to 800 m (2,600 ft)
- Supplied pre-calibrated and paired
- Optional wireless configuration via T24 Toolkit software
- Free visualisation software is also available
- Radio Equipment Directive (RED) approved



## Specifications

### Wind Speed Sensor (T24-WSSp)

#### Parameter

Measurement range	5 – 125 mph
Accuracy 5 to 10 mph	±0.5 mph
Accuracy 10 to 125 mph	±4%

#### Environmental

Operating temperature range	-20 to 55 °C
Storage temperature range (no batteries)	-40 to 85 °C
Maximum humidity	95%RH
Environmental protection with suitable cables existing through cable glands	IP67

#### Power Supply

Battery supply voltage (pair of D Cells)	2.1 – 3.6 Vdc
Current	60 – 65 mA
Standby / low power mode	5 – 20 µA
Reverse polarity protection	-32 Vdc

#### External

Power supply voltage	5 – 18 Vdc
Power supply ripple	50 mV ac pk-pk
Current	60 – 65 mA

#### Battery life in low power mode generating results every second

Pair D cells constantly on	1 year
Pair D cells 12 sessions per day of 10 mins	6 years

### In-Cab Display (T24-DWS)

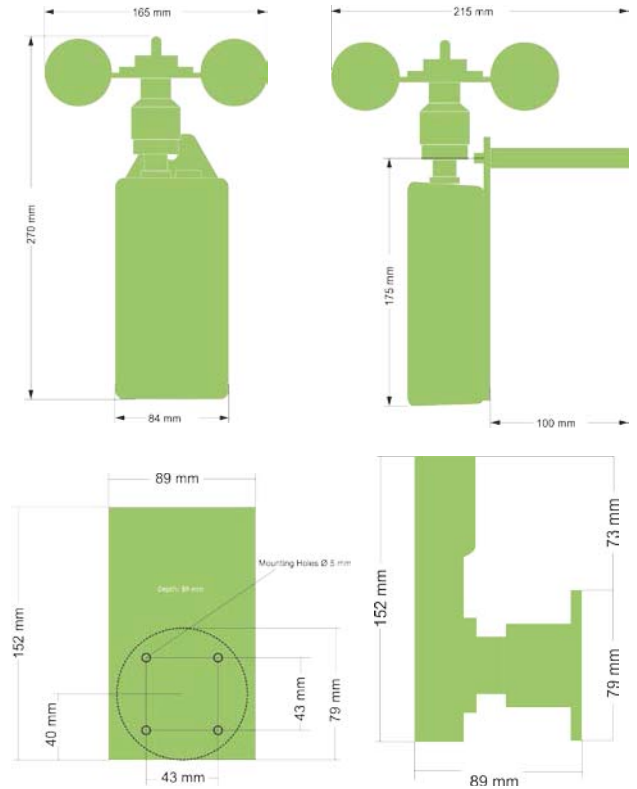
#### Power Supply

Power Supply Voltage	8.0 – 36 Vdc
Active current	35 to 40 mA
Low power mode 'off' current	120 – 160 µA

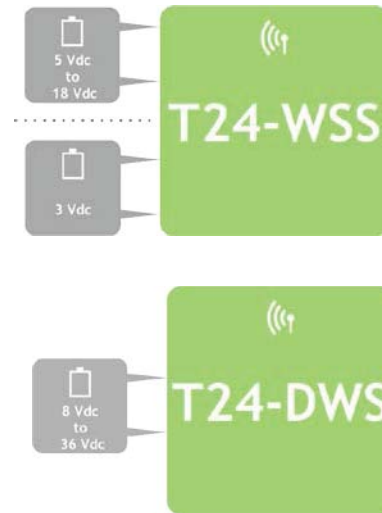
#### Environmental

IP rating	IP67
Operating temperature range	-10 to +50 °C
Storage temperature	-40 to +85 °C
Humidity	95%RH
Physical	90 mm x 152 mm x 89 mm

## Mechanical



## Electrical



## Order Codes

### T24-WSSp

Wireless wind speed sensor with pivot

### T24-DWS

Surface mounting display module for wind speed sensor

Manual Reference: 517-937

Mantracourt Electronics Ltd  
The Drive, Farringdon  
Exeter, Devon, UK  
EX5 2JB

Tel: +44 (0)1395 232020  
Email: sales@mantracourt.com  
mantracourt.com

