# Vaisala AviMet® Wind Panel Display WID511

## For Use in Aviation Applications

The Vaisala AviMet® Wind Panel Display WID511 is designed for viewing real-time measurements from Vaisala wind sensors in aviation applications, in accordance with the latest ICAO standards and recommendations. The display uses a compact 5.7" LCD screen suitable for aviation-related operating environments such as air traffic control towers, where excellent readability in both bright and dim light is required. The WID511 is controlled using an easy-to-use resistive touch screen, with a clear, uncluttered user interface for simple operation.
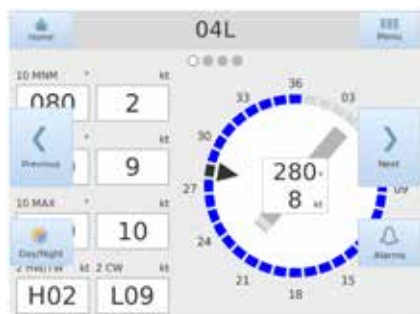


## Robust Display with High Performance

The WID511 is robust, designed and tested for demanding industrial electromagnetic and environmental specifications. It is equipped with a resistive touch screen that can be controlled with either bare or gloved hands, or any other suitable object. The WID511 is an independent stand-alone wind panel display unit that can collect data from multiple wind sensors with a four-times-per-second interval as recommended by ICAO and WMO.

## Integrated Touch Screen for Efficient Operations

The WID511 has a full-size intuitive touch screen with a graphical user interface for easy navigation between separate wind data views – such as sensor pages – as well as simple display setting changes with straightforward item selection. Each wind sensor view is in wind rose and alphanumeric formats as default, suitable for operational

use at airports in accordance with ICAO wind data display standards and recommendations. There are visual and audible alarms in all views to warn of serious events like sensor or system failures. A PIN code is required to access the maintenance mode advanced settings in order to prevent unauthorized changes to the display settings.

In order to receive data from Vaisala wind sensor like Vaisala WINDCAP® Ultrasonic Wind Sensor WMT700, Ethernet and RS-485 connections are standard. The WID511 can be mounted in different ways depending on where it is installed. It can be easily mounted on a standard IEC panel, desktop or wall.

# Technical Data

## Operating Environment

| | |
|---|---|
| Temperature range, operating | -20 … +60 °C (-4 … +140 °F) |
| Temperature range, storage | - 30 … +80 °C (-22 … +176 °F) |
| Humidity range, operating | 2 … 95 %RH, non-condensing |
| Vibration compatibility | MIL-STD-810G 514.6C-3 Procedure I, Cargo Vibration Test |
| Electromagnetic compatibility | IEC/EN 61326-1 Industrial Environment |
| | CISPR 22, Class B (EN 55022) |
| | CISPR 24 (EN 55024) |

## Inputs and Outputs

| | |
|---|---|
| Supply voltage | 12 … 28 VDC |
| Maximum power consumption at +20 °C (+68 °F) | 15 W |
| Typical power consumption at +20 °C (+68 °F) | 4 W |
| Data interfaces | Ethernet (10/100 MBit/s) |
| | RS-485 |

## User Interface

| | |
|---|---|
| Display element | 5.7" TFT LCD |
| | 640x480 VGA resolution |
| | >500 cd/m² luminance |
| Brightness control | Manual |
| User input interface | Touch screen, resistive |
| Audible alarm | > 80 dB(A) at 1 meters, 2 kHz |
| Observation mode | Wind data pages |
| Navigation mode | Switch between sensor pages |
| | Alarm log |
| | Day-time and night-time views |
| | Access to maintenance mode |
| Maintenance mode | Display cleaning (wipe) mode |
| | Touch screen calibration |
| | Volume setting |
| | Brightness setting |
| | Product information view |
| | Advanced settings (PIN login) |
| | Configuration Settings |
| | Configuration file import/export |
| | Software update |

## Displayed Values

| | |
|---|---|
| Wind speed and direction | According to ICAO standards and recommendations |
| | 3-second average |
| | 2-minute average |
| | 10-minute minimum |
| | 10-minute maximum (Gust) |
| | 10-minute variation |
| | Head/tailwind, crosswind |

## Mechanics

| | |
|---|---|
| Housing material | PC/ABS |
| Ingress protection class | IP20 |
| Flammability class | UL94 V-0 |
| Mounting options | panel, desktop, wall |
| Panel installation standard compatibility | IEC 61554 |
| Panel mounting aperture dimensions | 138 mm x 138 mm |
| Panel mounting frame dimensions | 144 mm x 144 mm |
| Drop test compatibility | MIL-STD-810G 516.6 Procedure IV, Free Fall (Rough Handling) |
| Directive compliance | EMC, LV, WEEE, ROHS |
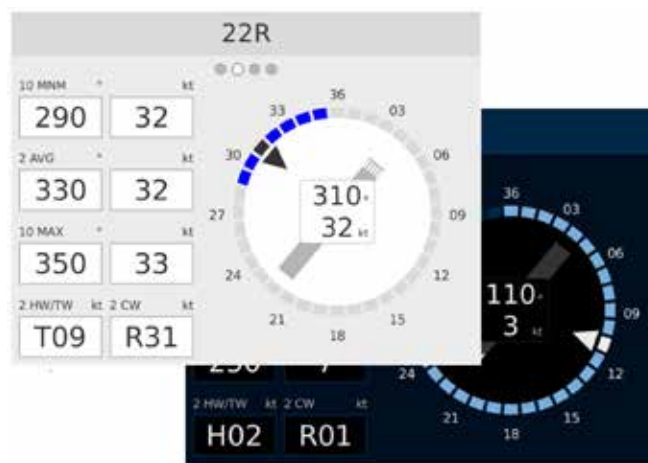


*WID511 day-time and night-time color schemes*

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