

# WIND 30TU

## WTU Display for Applied Meteorology

- **Multichannel wind, temperature and humidity display**
- **High contrast with automatic brightness control**
- **On-line configurable**
- **Desktop, panel or wall mounting**
- **Excellent solution for emergency response & industrial applications**



Vaisala's WIND 30TU Display is a dedicated unit for displaying and processing wind, temperature and humidity data. Wind speed, as well as temperature and humidity values are presented numerically with 3-digit 7-segment LED elements. The wind direction and its variance are displayed in two easy-to-read LED circles, the inner circle presenting wind direction and the outer one its variation.

Automatic brightness control of the display is enabled by means of a light sensor that responds to the ambient light conditions. The front panel filter is mat-finished having excellent optical qualities for light transmission. These features offer good readability in different light conditions.

A rotating switch and a 3-state push button are used to select between different wind measurement sites and operating modes (instantaneous, 2 minutes, 10 minutes winds). Temperature and humidity values are one minute averages. Configuration of the display and telecommunication modes is performed via a serial line using a PC terminal program. Configuration enables modification of the user

interface, calculations and input/output functions.

The face size 144 × 144 mm fits to standard DIN panels. The slim line body design, however, enables mounting even to 115 × 133 mm panel openings. The stand included in the delivery enables using the display on a table or it can be fastened to a wall or ceiling.

Vaisala's analog sensors (HMP45A, WMS, e.g.) can be directly connected to the analog inputs of the display. If the site is located far from the display, wind or TU transmitters can be used to manage the distance.

The standard opto-isolated RS-485 is typically used as a service line or to chain several displays together. This offers easy means to display wind data simultaneously in different locations. An optional communication module (such as an isolated RS-485 or modem) provides means to receive data from several measurement sites located far away.

EMC as well as surge protection are standard features of Vaisala displays.

## TECHNICAL DATA

## WIND 30TU DISPLAY FOR APPLIED METEOROLOGY

### GENERAL

Type	Multichannel averaging WTU display
Features	Automatic brightness control Desk top, panel or wall mounting (stand included)
Material	Aluminium frame, ABS case, grey
Dimensions	144 × 144 mm, depth 65 mm Body design allows 115 × 133 mm panel mounting
Weight	610 g
Supply voltage	10.5 – 15.5 VDC
Power consumption at max. brightness	20 W

### USER INTERFACE

Speed	3-digit 7-segment red LEDs
Humidity/channel	3-digit 7-segment yellow LEDs
Temperature	3-digit 7-segment yellow LEDs
Speed unit	Back-illuminated red LED; m/s, km/h, kt
Direction	Analog red/yellow 2 × 36 LEDs in a circle (inner circle for inst/avg, outer circle for variation)
Operating mode	Back-illuminated yellow LED; instant, 2 min or 10 min winds

#### Operation

- 3-state push button for manual light intensity adjustment, or self-test and reset control
- Rotating switch for operating mode selection
- Display parameter configuration with a PC terminal program via a serial line

### INPUT/OUTPUT

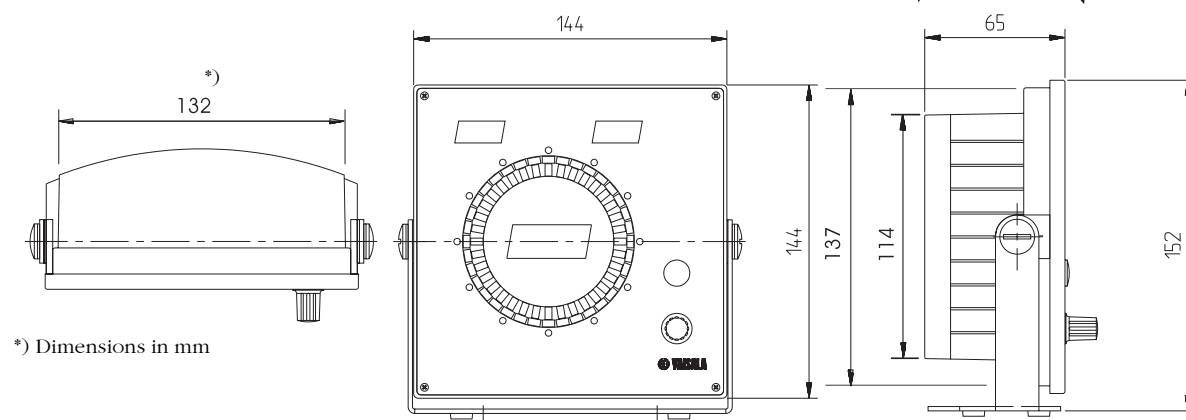
Serial I/O	• NMEA compatible opto-isolated RS-485 input applicable to RS-232 or current loop • 2-wire RS-485 transceiver
Optional I/O	Communication module interface for RS-485, modem, etc.
Analog inputs	4 + 2 channels, current or voltage for analog sensors/transmitters
Relay coil drive	120 mA max. sink
Reference output	3.5 VDC, 5 mA
Connections	25 screw terminals 1.5 mm <sup>2</sup> maximum wire

### ENVIRONMENTAL

Storage temperature	-40 ... +60 °C
Operating temperature	+5 ... +55 °C
Humidity	2 ... 100 % RH
EMC	CE compliant
Vibration	according to MIL-STD-167-1

### OPTIONS

Power supply for 115 ... 230 VAC



\*) Dimensions in mm



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