



M I E R I J  
M E T E O S Y S T E M S

# MW 21 COMBINED WIND SENSOR

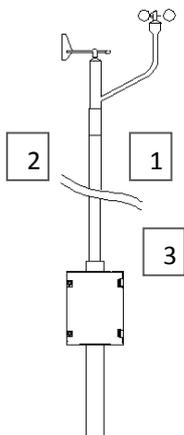
Fast and reliable, light-weight wind sensors available in one set



- Wind speed/ direction sensor on a single bracket
- Lubricated for a wide temperature range
- Sea-water-resistant powder coating
- Assured quality along international standards

This wind sensor combines an anemometer (wind speed sensor) and a wind vane on a single bracket. The sensors measure optically, so there is no wear on electronic components. The stainless steel precision bearings are sealed on both sides, and lubricated for a wide temperature range. The powder coating applied to the stainless steel mounting bracket makes it resistant to seawater and other harsh environments. The anemometer has three light-weight cups of a special design. They ensure low threshold and that the instrument responds quickly to changes of the wind. The absence of electromechanical contacts also ensures fast response and maximum reliability. The anemometer has an operating range of 0 to 50 m/s. The wind vane is balanced, so it does not have any preferred position. The low weight of the vane enables it to respond to minor wind speeds. The wind vane measures the wind direction from 0 to 360°, and divides it via a 6 bits Gray code in 64 directions. Consequently its resolution is 5.6°. The instrument is protected against inductive interference in accordance with prevailing international standards. The sensor should be installed at a location which permits free wind access. Meteorological advice regarding suitable locations can be obtained from Mierij Meteo.

## Installation Examples



## Options/Accessories

- 1 MK 21-15 Cable for MW 21, 15 meter
- 2 MK 21-30 Cable for MW 21, 30 meter
- 3 MU 32 Electronics Unit/ datalogger

## Users



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## TECHNICAL SPECIFICATION: MW 21

PERFORMANCE (WIND VANE)	
Operating Range	0 - 360°
Resolution	5.6°
Codedisc error	<3°

PERFORMANCE (ANEMOMETER)	
Operating Range	0 tot 50 m/s
Resolution	0.04 m wind run
Starting Speed	< 0.5 m/s

PHYSICAL	
Size:	770 x 555 mm. Housing $\varnothing$ 52mm
Weight:	3 Kg
Material:	Stainless steel / powder coated, anodised aluminium 51ST
Operating Temperature:	-20..+60°C
Protection:	IP-65

INSTALLATION	
Installation	Vertically, free-standing, on a $\varnothing$ 48 mm mast
Mounting	Socket joint with M8 socket screws
Connection	7-pole Plug, DIN EN 60664-1, DIN EN 60512-3-2, DIN EN 60512-3-1, DIN EN 60529

ELECTRICAL	
Supply Voltage	15 VAC or 18...24 VDC
Power Consumption	110 mA
Output Signal	Wind speed: Pulse differential +/- 8V Wind direction: digital differential +/- 8v
Output impedance	400 $\Omega$ / 10 nF
Static Discharge	The instrument is protected against outside inductive interference up to a Discharge power of 1500 Watt.

OTHER	
Maintenance	Once a year, depending on local conditions
Calibration Certificate	A calibration certificate with the validity of 1 year is available on request
Warranty	2 years