

## WINDVANE type DIR21+

Low cost Potentiometer type wind vane



Also available with integrated 2 wire 4-20mA output (type DIR21+/4-20mA)

Windvane DIR21+ is a reliable wind direction sensor and is intended for general professional applications, such as: meteorology, wind energy applications, environmental technology etc. Rugged components stand up to hurricane-force winds, yet are sensitive to a light breeze. Includes sealed stainless-steel bearings for long life. The range and accuracy specifications of this unit have been verified in wind-tunnel tests. The DIR21+ windvane reported wind speeds of 250 km/h. The DIR 21+ is easy to install (using stainless steel vertical M5 bold), easy to connect and easy to service. Standard cable length is 2 meter which can be extended to any length (<75 m) using an optional waterproof cable connector. Can be used together with MAX40+ anemometer in combination with datalogger EKO21N or iBOX.

## **SPECIFICATIONS**

General:	
WindDirection	Wind vane with long life potentiometer with stainless steel shaft
Life time	expected life time > 5 years
Required Cable Type	3 wire conductor (shielded)
Cable length	standard 2 meter, to expand using a connection kit
Recommended Maximum Cable Length	< 75 meter
<u>Material:</u>	
Wind Vane	UV -resistant ABS, total length 22 cm, overall height 16 cm
Housing	Delrin, Waterproof
Weight	0,5 kg
Damping ratio	appr 0,4
Mounting:	By M5 bolt
Wind Direction Range	0° to 360° (mechanical angle) lineair function with potentiomeer value
<u>Accuracy</u>	north is 0/360 degrees, south is 180 degrees, with south indicator
Wind Direction	appr +/- 3 degr , (dead band appr +/- 3 degrees) , meet WMO requirements
<u>Connections</u>	Standard cable length 2 meter (to expand using connection kit)
Brown	Supply voltage (recommended appr. 5 V DC)
Green	Ground
White	Wind direction potentiometer wiper (typ 20 kOhm)
Standard factory calibration	
Options:	
	<ul> <li>sensor mounting arm for mast is available (for any diameter mat size)</li> </ul>
Standard factory calibration	Wind direction potentiometer wiper (typ 20 kOhm) zero value of potmeter between 0-3 degrees, max value at typ 357 degrees (dead band appr +/- 3 degr at 0-360), half value of potmeter at typ 180 degrees - mounting stub mast (10cm) of stainless steel with M5 bolt - extra cable and waterproof cable connector - sensor mounting arm for mast is available (for any diameter mat size)

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