

### **Compact wind vane**

With compact size and high mechanical strength, this sensors are particularly suited for use in strong wind applications, where long term reliability without maintenance is required, as in wind farms and wind turbine surveys. Ideal also for portable and light AWS and for wind-alarm applications where wind speed and direction are both to be considered. On this regard, LSI LASTEM data loggers can detect specific alarm conditions and open digital outputs when wind speed is over a programmable value and wind direction is coming from a defined angle.

	Order numb.	DNA212	
	Wind speed	Principle	Hall effect sensor
		Measuring range	0÷360°
		Threshold	0,25 m/s
		Uncertainty	5°
	General information	Output	0÷1 V
		Connector	4 pin IP65 watertight connector
		Housing	Anodized aluminum
		Power supply	10÷14 Vdc
		Power consumption	10 mA
		Mounting	Mast ø 48 ÷ 50 mm
		Operative temperature	-35÷ +70°C (without ice)
		Data logger compatibility	M-Log (ELO007-008), R-Log (ELR515), E-Log (all models)
	Accessories	Order numb.	
		MN1071	Cable each meter
	1 1	DYA046	Coupling bar For WS+WD sensors on ø 45 ÷65 mm pole
		DNA218	Spare part: vane
		MC1040	Spare part: screw for DNA218 vane
		MM2001	Spare part: bearing



## Standard wind vane (direct output)

Wind direction sensor with direct signal output. These wind vanes are ideal when requirements calls for low thresholds and good accuracy even at very low wind speed. DNA310-311#C uses a Hall-effect encoding system. DNA314#C is equipped with a potentiometer to reduce power consumption in very low energy applications. DNA311#C is also equipped with heaters to avoid ice formation on its body in very cold environments.

Order numb.	DNA310#C	DNA311#C	DNA314#C
Principle	Hall effect sensor 0÷1 V		Potentiometer
Output			$0\text{-}2000~\Omega$
Power supply	12 Vdc	24 Vdc/ac (heater) 12 Vdc (direction)	-
Heater	-	SI	-
Heater operative temperature		>-20°C	
Power consumption	10 mA	20 W	Max 2 mA
Calibration certificate	Included		
Data logger compatibility	M-Log (ELO007-008), R-Log (ELR515), E-Log (all models)		



### Standard wind vane (analog output)

Wind direction sensor with analog signal output. All models use a Hall-effect encoding system. DNA811-815 are equipped with heaters to avoid ice formation on its body in very cold environments.

Order numb.	<b>DNA810</b>	DNA811	<b>DNA814</b>	<b>DNA815</b>	<b>DNA816</b>
Principle	Hall effect sensor				
Output	4÷20	) mA	0÷20	) mA	0÷5 Vdc
Power supply	10÷30 Vca/cc	24 Vca/cc	10÷30 Vca/ Vcc	24 Vca/cc	10÷30 Vca/cc
Heater	-	YES	-	YES	-
Heater operative temperature		>-20°C		>-20°C	
Power consumption	0,5 W	20 W	0,5 W	20 W	0,5 W

#### **Common features**

Wind direction	Measuring range	0÷360°
	Uncertainty	3°
	Threshold	0,15 m/s
	Delay distance	1,2 m (at 10 m/s). According to VDI3786 and ASTM 5366-96
	Damping coeff.	0,21 (at 10 m/s). According to VDI3786 and ASTM 5096-96
General information	Connector	7 pin IP65 watertight connector
	Housing	Anodized aluminum
	Operative temperature	-35÷ +70°C (without ice)
	Mounting	Mast ø 48 ÷ 50 mm

# Accessories

# Order numb.



DYA046	Coupling bar For WS+WD sensors on Ø 45 ÷65 mm pole
DZC404	Calibration certificate Included in DNA010-011#C
DNA110	Cable for DNA31x#C L = 10 m
DNA125	Cable for DNA31x#C L = 25 m
DNA126	Cable for DNA31x#C L = 50 m
MG2252	7 pin free male connector for DNA31x#C
DWA510	Cable for DNA81x L = 10 m
DWA525	Cable for DNA81x L = 25 m
DWA526	Cable for DNA81x L = 50 m
DWA527	Cable for DNA81x L = 100 m
MG2251	7 pin free female connector for DNA81x sensors
DNA217	Spare part: rotor
MC1040	Spare part: screw for DNA217 rotor
MM2025	Spare part: bearings





Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.