

TECHNICAL SPECIFICATIONS

| | |
|------------------------|--------------------------------|
| Electrical features | |
| Power supply | 9-30 Vdc |
| Maximum current | 100 mA |
| Output | NPN, PNP or RS485 ¹ |
| Output maximum current | 100 mA |

¹Output according to model, each one has only one output type.

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|----------------|--------------------------------------|
| Measurements | |
| Range | 3-180 km/h |
| Starting speed | 8 km/h |
| Survival speed | 200 km/h |
| Accuracy | 1km/h (3-15 km/h) 3% (15-180Km/h) |

| | |
|---------------------------------|-------------------------------------------------------------------------------------------------|
| General features | |
| Material | PA + FV |
| Bearings | Stainless steel X65Cr13 |
| Type of connection | Cable: 3x0.75mm² @Anemo NPN/PNP 4x0.65mm² @ Anemo RS485 Lenght according to reference. |
| Weight (without cable) | 160 g |
| Dimensions | 125x139 mm |
| Storage temperature | -35°C +80°C |
| Working temperature without ice | -20°C +70°C |
| EMC | EN 61000-6-2:2001 EN 55022:2001, Class B |
| Protection | IP65 (UNE 20324:1993) |

REFERENCES AND ACCESSORIES

| | |
|------------|------------------------------------------------------------------------------|
| References | |
| 0103011101 | ANEMO4403 V3 NPN OUTPUT 213Hz@100km/h 10m CABLE |
| 0103012201 | ANEMO4403 V3 RS485 MODBUS 25m CABLE 9-30Vdc |
| 0103012202 | ANEMO4403 V3 RS485 MODBUS 10m CABLE 9-30Vdc |
| 0103012301 | ANEMO4403 V3 PNP OUTPUT 10Hz@1m/s 20m CABLE |
| 0103012206 | ANEMO4403 V3 RS485 MODBUS 10m CABLE 9-30Vdc - WITHOUT FINAL RESISTOR CLOSING |

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|-------------------------|---------------------------------------------------------------------------------------|
| Accessories | |
| 0103010505 | Stainless steel bracket AISI 304 |
| 0103010506 ² | Stainless steel bracket plus hardware for mounting the wind sensor on the bucket |
| 0103010507 ² | Magnets for flat ferromagnetic surfaces. This fixation system can support up to 90 kg |
| 0103010508 | 2 steel clamps kit that can be fixed to irregular parts measuring up to 63 x 45 mm |

²For other references, please contact us.



ANEMO4403 V3 NPN OUTPUT
ANEMO4403 V3 PNP OUTPUT
ANEMO4403 V3 RS485 MODBUS

ANEMO4403 V3
Wind speed sensor designed for different industries and sectors.

ANEMO4403 V3 DIGITAL OUTPUT is a digital output anemometer, with NPN, PNP and RS485 Modbus versions.

- Industrial design for extreme environments
- NPN, PNP or RS485 MODBUS digital output
- Stainless Steel bearings
- Measurement range up to 180 km/h



NUOVA CEVA AUTOMATION S.R.L.
via Don Signini 43 - 28010 - Briga Novarese - NO - ITALY
Phone +39 0322 93574
info@nuovaceva.it www.nuovaceva.it



APPLICATIONS

ANEMO4403 V3 DIGITAL OUTPUT has been designed to be used in industrial applications: cranes, solar panels, wind turbines, weather stations, greenhouses, irrigation systems...
It is usually connected to speed sensors such as tachometers (see references WM44-EVO11 V3, WM44-P V3, WM44-DRM V3), PLC's or dataloggers to display the wind speed and/or set alarms to predefined values or to obtain records during predefined periods of time.
The wind sensor must be fixed on a vertical position.

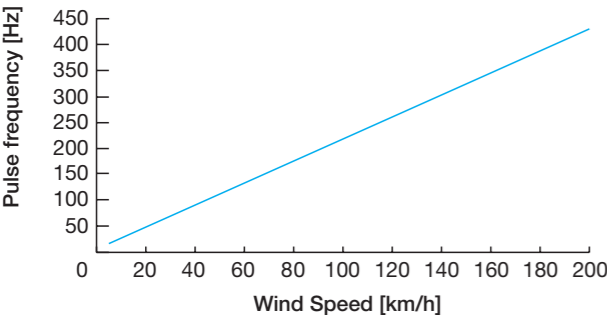
ANEMO4403 V3 NPN/PNP OUTPUT

OPERATING

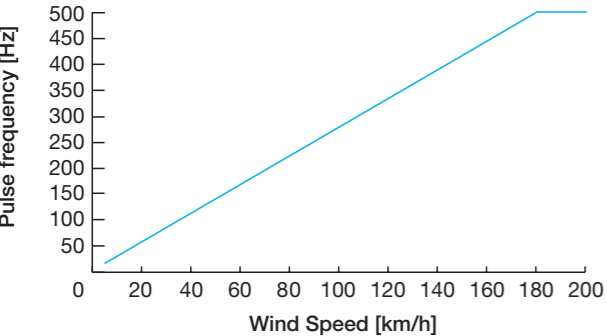
Up to 180 km/h of wind speed.
Output is a NPN or PNP square signal proportional to the wind speed.
The wind sensor must be fixed on a vertical position.

WIND SPEED - OUTPUT RATIO

NPN OUTPUT 213Hz@100km/h VERSION:
The wind speed is given by the function:
Wind Speed (Km/h) = Hz/2.13



PNP OUTPUT 10Hz@1m/s VERSION:
The wind speed is given by the function:
Wind Speed (m/s) = Hz/10
Wind Speed (km/h) = Hz/2.78

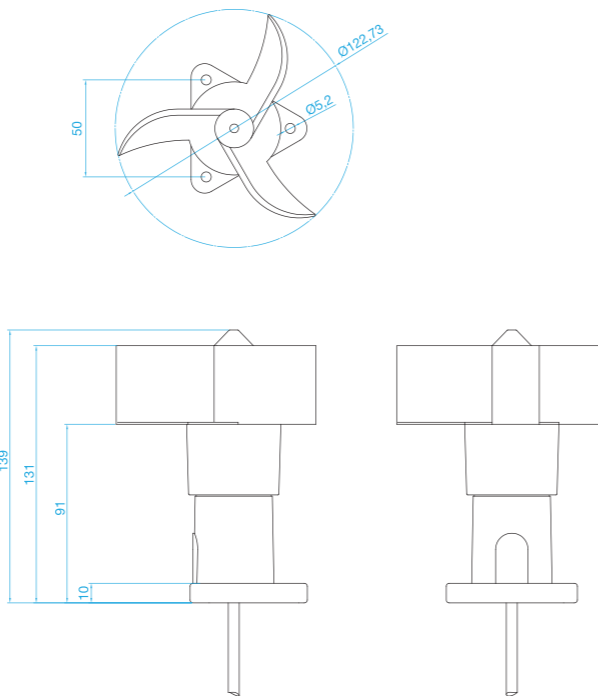


For other versions, please, contact IED.

CONNECTION

Wire colors:
VCC: Red
GND: Black
Signal: Yellow

DIMENSIONS



ANEMO4403 V3 RS485 MODBUS

OPERATING

Up to 180 km/h of wind speed.
Output is a RS485 MODBUS RTU communication.
The wind sensor must be fixed on a vertical position.

CONNECTION

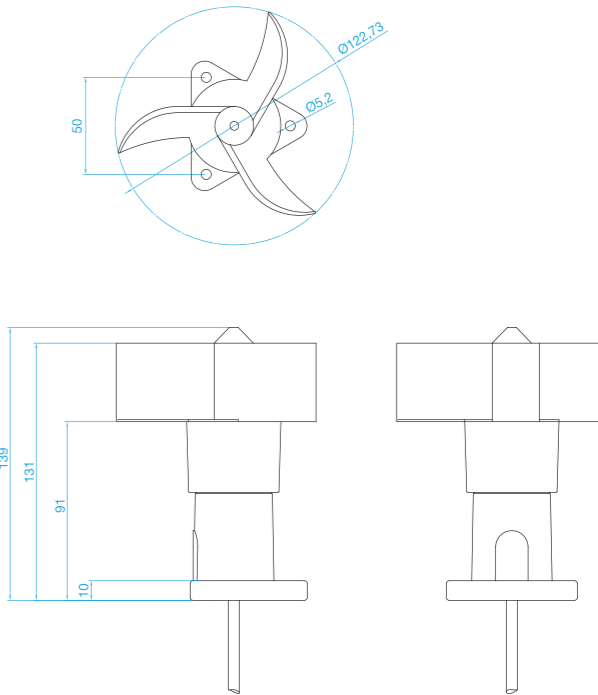
Unit is provided with a 4x0.65mm cable with 10 or 25 meters lenght (depending on version).

Wire colors:
VCC: blue
GND: white
A: orange
B: yellow

Termination resistor included (120 Ω) - WHERE INCLUDED

For no termination resistor version, please, contact us.

DIMENSIONS



PROTOCOL

Data format:
1 start bit, 8 data bits and 1 stop bit. 19200 baudios. Even parity. (For other options, please, contact us)

Protocol type:
MODBUS RTU

| Addr | 04 | 00 | 00 | 00 | 01 | CRCH | CRCL |
|------|----|----|----|----|----|------|------|
|------|----|----|----|----|----|------|------|

The wind speed is stored in 2 registers: @30001 y @40001. The user can read this value by using any of the 2 available functions (*Read Input Register* and *Read Holding Register*).

The ANEMO4403 V3 RS485 default adress is 244 <=> 0xF4. This value is stored in *Holding Register* @40002 and can be edited by the user. The user can configure any adress in the range 1 (0x01) to 255 (0xFF).

For more information, please, see Modbus RS485 19200 Protocol annex.