

## W8/W6 Series Propeller-type Wind Speed/Direction Sensors (Incl. Output)

Sensors in the W8/W6 series directly output both digital and analog signals for wind speed and direction. Signal pathways for wind speed and direction are brushless, a specially designed approach that allows for use of a transmissive photointerrupter, which obtains a more stable output than a reflective photointerrupter. An even more affordable analog-only model is also available.



### SENSOR TYPES

#### Low-speed sensor

Model no.	Analog/digital outputs
W855-E1S2	0-1 V DC/RS-232C
W855-E1S4	0-1 V DC/RS-422
W855-E5S2	0-5 V DC/RS-232C
W855-E5S4	0-5 V DC/RS-422

#### High-speed sensor

Model no.	Analog/digital outputs
W655-E1S2	0-1 V DC/RS-232C
W655-E1S4	0-1 V DC/RS-422
W655-E5S2	0-5 V DC/RS-232C
W655-E5S4	0-5 V DC/RS-422

#### High-speed sensor (Analog output only)

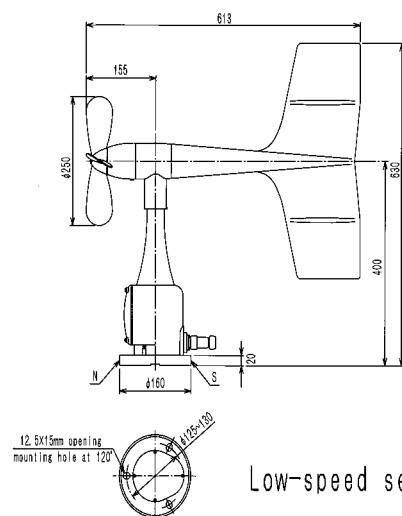
(Specs. differ from those given above)

Model no.	Analog output
W633-E1	0-1 V DC/w/brushes
W613-J4	4-20 mA/w/brushes

### SPECIFICATIONS

<b>Model</b>	Brushless encoder
<b>Speed sensor</b>	Brushless optical pulse-type propeller
<b>Direction sensor</b>	Rotary encoder-type vane
<b>Output</b>	RS-232C or RS-422 0-1 V DC or 0-5 V DC
<b>Threshold</b>	0.4 m/s or < 2 m/s
<b>Weatherability</b>	Winds of $\geq 90$ m/s
<b>Accuracy</b>	
Speed	High-speed: $\pm 0.5$ m/s at wind $\leq 10$ m/s $\pm 5\%$ at winds $> 10$ m/s Low-speed: $\pm 0.3$ m/s at winds $\leq 5$ m/s $\pm 5\%$ at winds $> 5$ m/s
Direction	$\pm 5^\circ$
<b>Power source</b>	12 V DC
<b>Power consumption</b>	$\leq 170$ mA
<b>Operating range</b>	-10 to $50^\circ\text{C}$
<b>Materials</b>	Propeller: polycarbonate resin Body: polycarbonate resin Vane: FRP (glass fiber-reinforced)
<b>Paint</b>	Munsell color 8YR 7.3/1.3
<b>Weight</b>	Approx. 3.0 kg
<b>Inspections</b>	In-house or Japan Meteorological Agency

### Sensor dimensions



Low-speed sensor



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