

# Long Range Wireless Anemometer

SWS-301

## FEATURES

- instant wind data – data transmission each 2 seconds
- easy installation without running cables
- long range (up to 400 m or 4 km with directional yagi antenna)
- up to 4 years sensor battery life
- 3 programmable alarm relay outputs
- no threat of lightning damage
- no photovoltaic to position or clean
- durable and shock proof anemometer cups
- magnetic mounting of sensor (accessories)
- self-leveling sensor mounting (accessories)
- magnetic mounting of receiver (accessories)
- optional individual calibration certificate

## APPLICATIONS

- crane applications
  - mobile cranes
  - tower cranes
  - bridge cranes
- lift applications



Range up  
to 400 m





**SENSOR MOUNTING ACCESSORIES:**

- self-leveling mounting assembly
- magnetic self leveling mounting assembly
- magnetic mounting assembly

**SPARE PARTS:**

- spare anemometer rotor
- spare sensor



**ACCESSORIES:**

- receiver magnetic mounting assembly
- external antenna with 4 m cable, magnetic mounting
- YAGI antenna with 3 m cable

**OPTIONS:**

- wind tunnel certificate version available
- 50 Ohm sensor output for connecting the external antenna (SMA connector)
- additional receiver unit

## TECHNICAL DATA

<b>Measurement range:</b>	0,6 - 50,0 m/s
<b>Unit of measurement:</b>	m/s, km/h, knots, mph
<b>Averaging period:</b>	selectable 2 s, 10 s, 30 s
<b>Transmission distance:</b>	up to 400 m up to 1km with directional yagi antenna with 2 yagi antenna: 5-8 x nominal range
<b>Operating voltage:</b>	12 - 24 V DC
<b>Power consumption:</b>	max. 50 mA
<b>Operating Frequency:</b>	868 MHz, optionally 908 Mhz
<b>Temperature operating range:</b>	-25 ... +60 °C
<b>Outputs:</b>	3x relay, contact rating 2 A/12 V
<b>Signal output (type WSM W301/4-20mA):</b>	4...20 mA, (not isolated, common ground with supply) 4 mA = 0 m/s 20 mA = 50 m/s
<b>Antenna input (receiver):</b>	50 Ohm, SMA connector
<b>Data transmission rate:</b>	every 2 sec
<b>Resolution:</b>	0,1 m/s
<b>Accuracy:</b>	+/- 3 %
<b>Battery - sensor (changeable):</b>	3,6 V AA Lithium battery, enclosed
<b>Battery life:</b>	up to 5 years
<b>Sensor bearings:</b>	2 x precision stainless steel Ball bearing
<b>Material:</b>	- sensor housing: AL/PVC - cups (replaceable): PA (NYLON) - casing receiver: ABS
<b>Dimensions - receiver:</b>	150 x 80 x 55 mm
<b>Weight - receiver:</b>	260 g
<b>Dimensions - sensor:</b>	Height 210 mm, overall diameter cup to cup 120 mm
<b>Weight - sensor:</b>	140 g
<b>Mounting:</b>	sensor mounts on a pipe with $\varnothing$ 20 mm diameter

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## MODELS

- SWS-301: 3 x relay outputs
- SWS-301/4-20mA: 3 x relay outputs + 4-20 mA output