

wittich & visser
scientific and meteorological instruments

Long Range Wireless Wind Speed and Direction Sensors

with 4...20 mA
or pulse output

**W110
W110L**



range up
to 1300 m

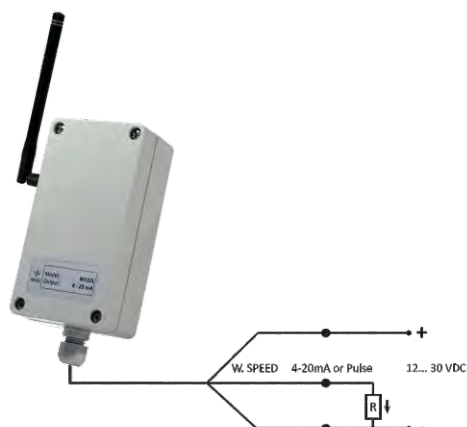
FEATURES

- easy installation without running cables
- long range: up to 1300 m
(400 m at W110L model)
- up to 3 years sensors battery life
- 4-20 mA or pulse output
- instant wind data – data transmission
each 2 seconds
- durable and shock proof anemometer cups
- optional individual calibration certificate

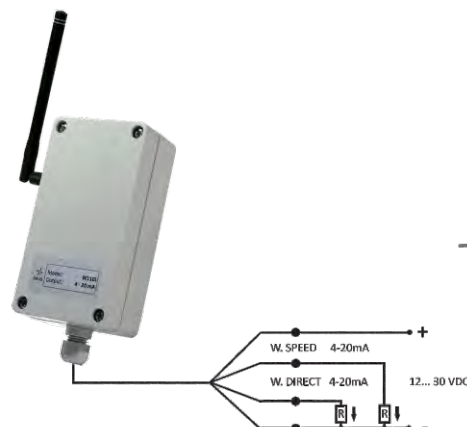


CONNECTION

W110-4-20/WS, W110-PULSE/WS



W110-4-20/WSD



MODELS

Up to 1300 m range (external antenna):

W110-4-20/WS - wind speed sensor, 4-20 mA output

W110-4-20/WSD - wind speed and direction sensor, 2 x 4-20 mA output

W110-PULSE/WS - wind speed sensor, frequency output

Up to 400 m range (internal antenna):

W110L-4-20/WS - wind speed sensor, 4-20 mA output

W110L-4-20/WSD - wind speed and direction sensor, 2 x 4-20 mA output

W110L-PULSE/WS - wind speed sensor, frequency output



OPTIONS

Sensors options:

- 50 Ohm antenna SMA connector for external antenna
- individual wind tunnel certificated wind speed sensor

Receiver options:

- custom modified outputs

ACCESSORIES

- sensor magnetic mounting assembly
- self levelling sensor mounting assembly
- magnetic self levelling sensor mounting assembly
- directional 9 db yagi antenna, SMA connector
- external omnidirectional antenna with 3 m cable, SMA connector



SPARE PARTS

- spare anemometer cups
- spare wind vane



TECHNICAL DATA

WIND SENSORS

Wind speed measurement range:	0,6 ... 50,0 m/s
Wind speed resolution:	0,1 m/s
Wind speed accuracy:	+/- 3 %
Wind direction measurement range:	0... 360° , no blank sectors
Wind direction resolution:	1°
Wind direction measurement principle:	magnetic, contactless
Wind direction accuracy:	+/- 2,5°
Data transmission rate:	every 2 sec.
Battery:	3,6V AA Lithium battery (enclosed)
Battery life:	up to 3 years (W110), up to 4 years (W110L)
Bearings:	precision stainless steel Ball bearing
Dimensions - WS sensor:	Height 210 mm, overall diameter cup to cup 120 mm
Dimensions - WSD sensor:	Height 290 mm, overall vane diameter 220 mm
Material - sensor housing:	Anodized Aluminium, PVC
- cups (replaceable):	PA (Polyamide)
- vane (replaceable):	Carbon
Mounting:	the sensor mounts on a pipe with $\varnothing$ 20 mm outside diameter
Options:	wind tunnel certificated version available

RECEIVER

Transmission distance:	type W110L	up to 400 m
	type W110	up to 1300 m
Operating Frequency:	868 MHz, optionally 908 Mhz	
Operating voltage:	12...30 V DC	
Power consumption:	max. 60 mA	
Reverse polarity protection:	YES	
Transient voltage protection:	YES	
Temperature Operating Range:	-30 ... +60 °C	
Signal output - Wind speed:	W110-4-20	4...20 mA, 3 wire 4 mA = 0 m/s 20 mA = 50 m/s output at no signal = 3,6 mA
	W110-PULSE	PULSE, Hi SIDE 0 m/s = 0 Hz 50 m/s = 500 Hz
Signal output - Wind direction.:	W110-4-20	4...20 mA, 3 wire 0° degree = 4 mA 359° degree = 20 mA output at no signal = 3,6 mA
Cable connection:	internal PCB terminals	
Antenna input:	W110 50 Ohm, W110L	SMA connector internal antenna
Casing:	ABS, IP68, 120 x 65 x 42 mm	