

Mottech Wind Speed Sensor

Mottech anemometer uses a sensitive 3-cup anemometer designed to measure wind speed and wind run.

The cups are made of carbon fiber material, with high intensity and low starting threshold. The signal processing units are built in the housing shell. It can be widely used in The Mottech Anemometer can be connected directly to any controller in Mottech's system via analog input or Mottech Smart Card.



Features and Benefits

Easy Installation



Various output signals optional



Light structure



Overall carbon fiber material



Strong corrosion resistant ability



Low starting threshold



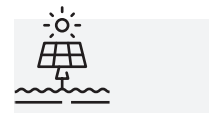
Applications



Agriculture irrigation



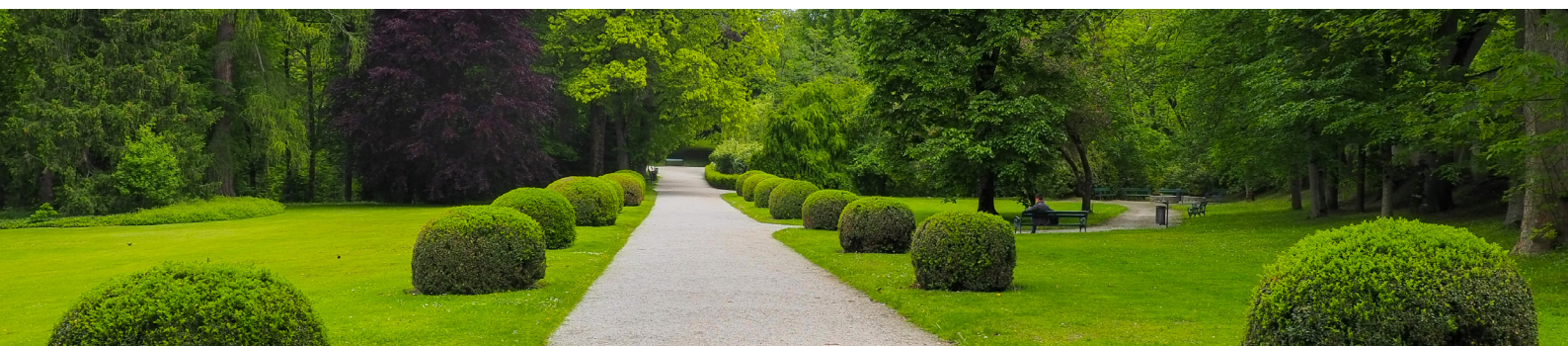
Weather monitoring stations



Solar & wind power generation



Mobile weather monitoring vehicles



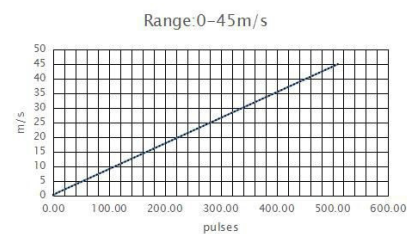
Mottech Wind Speed Sensor

Technical specification

Output	Pulses	4-20mA	0-5V	RS485
Supply Voltage	5V, 12V-24V	5V,12V-24V	5V,12V-24V	5V,12V-24V
Load Capacity	>1k Ω	<500 Ω (typ 250 Ω)	>1k Ω	
Range	0-45m/s	0-45m/s	0-45m/s	0-45m/s
Accuracy	$\pm(0.3+0.03V)m/s$; (V is the current wind speed)			
Starting Threshold	<0.5m/s			
Limit wind speed	50m/s			
Ingress Protection	IP65			
Operating Temperature	-40 $^{\circ}$ C~ +50 $^{\circ}$ C			
Cable Grade	Nominal voltage: 300V, Temperature grade: 80 $^{\circ}$ C			
Weight(unpacked)	170g			
Dimension	Cup rotor: ϕ 179mm, Height: 160mm			
Main material	Carbon fiber			
Storage Condition	10 $^{\circ}$ C-50 $^{\circ}$ C@20%-90%RH			
Code	M.SENS-100-P (Pulses) / M.SENS-100-A (4-20mA)			

OUTPUT CHARACTERISTICS

Pulses



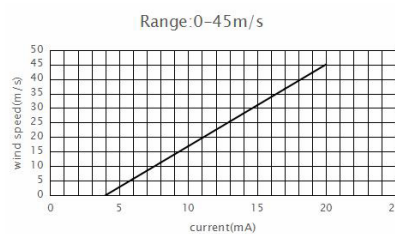
Characteristic transfer function

$$F=0, V=0; F \neq 0, V=0.1+0.0875 \times F$$

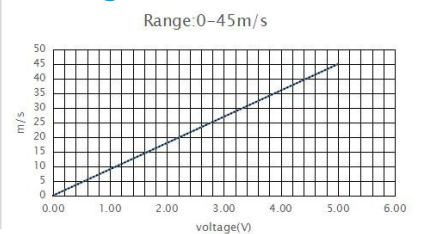
V = wind speed (m/s)

F = output frequency (Hz)

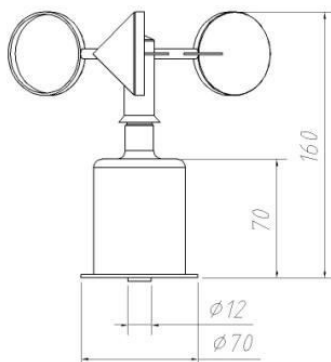
Current



Voltage



Dimensions



Mounting

Flange mounted, fix four screws on the bracket and keep the product horizontal.

Connector dimension

ϕ 15mm (recommended reserving ϕ 25mm for wiring)

