

## BWS-06 Wind Speed and Direction Sensor

The traditional cup anemometer and wind vane takes place in an individual mechanical enclosure. In the anemometer's enclosure an infrared opto-chopper transmits square-sign proportional to the wind speed, and in the wind vane's body a special field sensor determines the actual direction by 1° resolution. The direction sensor doesn't contain any potentiometer so there is no dead-band around 0° (North).

The device has built-in microcontroller to control the measures and to send the results to the data logger or PLC.

The device has polyglot (multilingual) protocol to support Boreas' System-6 and the industry-standard MODBUS protocol simultaneously so the customer has the ability to use our latest development results with our BCU dataloggers or to implement industrial process control with MODBUS-compatible PLC. The serial interface has built-in over-voltage and lightning protection.



The BWSL-06 device implements our LogSense technology which implements the functionality of sensor and data logger with built-in solid-state memory. The stored data (with time stamp) could read out over the serial connector with our S6-ReadStation or MeteoLux program or can be transmitted over radio link or GPRS connection to our SocketServer. The LogSense device can control our ComBuoy communication device.

For particular demands the following sensors are available:

Sensor	Data Interface
BWS-06, BWSL-06	Digital RS-485
BWS-06/232, BWSL-06/232	Digital RS-232
BWS-06/AU, BWSL-06/AU	Analog 0-10 V (different ranges are available as well)
BWS-06/AI, BWSL-06/AI	Analog 4-20 mA (different ranges are available as well)

### Technical Data

	Speed	Direction
<b>Measuring Range</b>	0.1 - 75 m/s	0 - 360 °
<b>Resolution</b>	0.1 m/s	1°
<b>Accuracy</b>	0.5 m/s	±2 ° FSR
<b>Start Threshold</b>	0.4 m/s	0.3 m/s
<b>Power</b>	8-15 V / 1mA avg, 5 mA max.	
<b>Optional Heating</b>	16V / 2.5A AC max.	
<b>Data Interface</b>	Digital RS-485 or RS-232	
<b>Optional Data Interface</b>	Analog 0-10 V, 4-20 mA	
<b>Communication</b>	System-6 and MODBUS RTU protocol	
<b>Overvoltage Protection</b>	+/- 6,7V 600W@1msec (data lines)	
	+/- 17,1V 600W@1msec (power lines)	