



WOS200 wireless optical speed sensor is ideal for machine rotation speed monitoring, especially for high-speed machines. The sensor is compact and completely wireless. The distance between the sensor and machine can go up to 50cm. The machine rotation speed can be as high as 1500,000 RPM. The wireless speed sensor can monitor remotely with multiple years of battery life. Battery is replaceable and measurement interval is user-adjustable. With IP67 waterproof level, WOS200 can work in a harsh environment reliably.

WOS200 requires to be used with Broadsens's [edge-computing gateways](#).



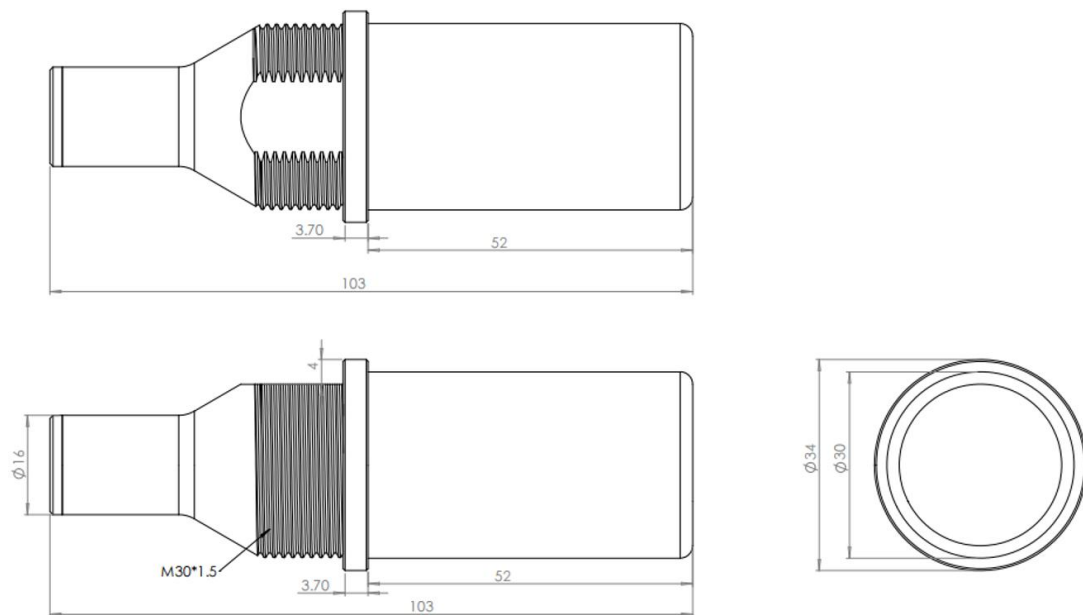
Wireless optical speed sensor with mounting bracket



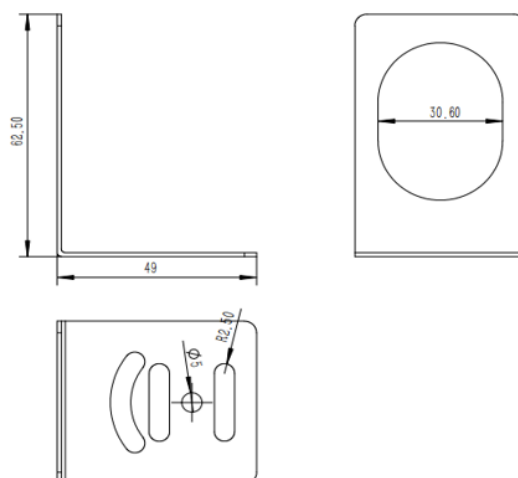
Parameters	Description
Measurement distance	1cm - 50cm
Rotation speed	60 –1500,000 RPM
Measurement interval	5s, 10s, 30s, 1m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr user adjustable
Battery	ER14505,2700 mAh, replaceable
Power consumption (room temperature)	Average idle current $\leq 12\mu\text{A}$ ; 1.86 mA @5s interval, 0.16mA @1m interval
Wireless protocol	BLE 5.2 at 2.4GHz
Certificates	FCC, IC, TELEC, KCC, CE (EU), RCM, NCC, WPC
Wireless distance	Up to 200m in open space
Size	Diameter:34mm; length:103mm
Weight	80 g(including battery, not including mounting accessories)
Mounting	Mounting bracket with screws
Working temperature	-40°C - 85°C
Humidity	10% - 90% RH
Protection	IP67

## Advantages of wireless optical speed sensor WOS200

- WOS200 is completely wireless without any wires or cables.
- WOS200 is ideal for high-speed rotation machines
- Distance from the sensor to the machine can be as far as 50cm
- Multiple WOS200 can be used to monitor rotation speed in multiple spots in parallel
- Alarm function. Alarm thresholds can be set up when machines rotation speed is either too high or too low
- WOS200 can be used to trigger SVT-A series wireless vibration sensor data acquisition
- Sensor battery can be replaced in the field quickly without any tools
- Up to 10 years battery life (depending on measurement intervals)



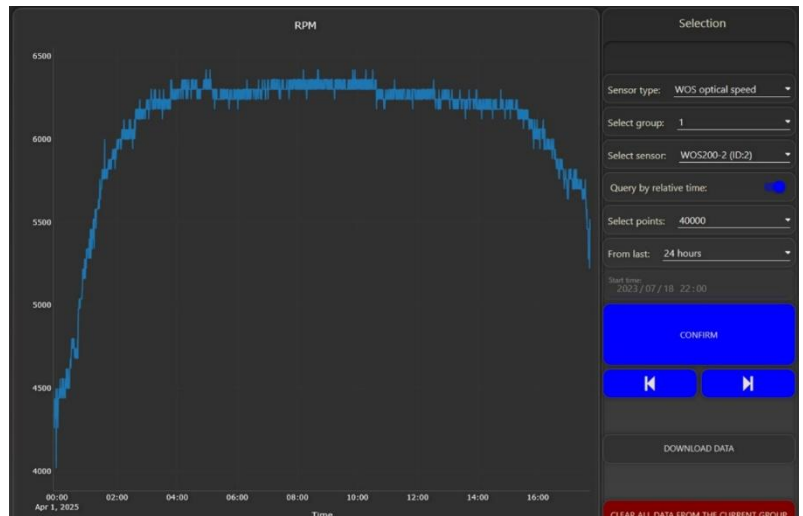
**WOS200 mechanical drawing**



**Mounting bracket drawing (sold separately)**

## Monitoring Software

BroadVibra Vibration monitoring software at the gateway is based on open-source architecture. It can be accessed with all major web browsers. Database is also included



### Measurements

WOS200-00002(WOS-2): 2025-03-17 17:42:53, Measurement: On, rpm= 5820  
WOS200-00003(WOS-3): 2025-03-17 17:42:54, Measurement: On, rpm= 6720  
WOS200-00006(WOS-6): 2025-03-17 17:42:54, Measurement: On, rpm= 33480

### Side panel

WOS-3 (ID:3)

TURN ON MEASUREMENTS

TURN OFF MEASUREMENTS

### WOS Optical Speed Sensor Information

ID	Description	Group	Serial	MAC address	RSSI	Battery	Version	Last update
2	WOS-2	1	WOS200-00002	d7:3e:c1:75:d8:02	-42 dBm	3.61	1.8	2025-03-17 17:39:41
3	WOS-3	1	WOS200-00003	df:e4:ac:02:50:2c	-42 dBm	3.66	1.8	2025-03-17 17:39:39
6	WOS-6	1	WOS200-00006	cc:be:61:b0:57:2c	-46 dBm	3.62	1.8	2025-03-17 17:39:39

## Software advantages

- . Real-time monitoring
- . Intuitive data visualization
- . Alarm & threshold setup
- . Scheduled data acquisition
- . Time-series database
- . Key parameters trend charts
- . FFT analysis
- . Advanced filtering
- . OTA firmware upgrade
- . Open source
- . Secure transmission

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