

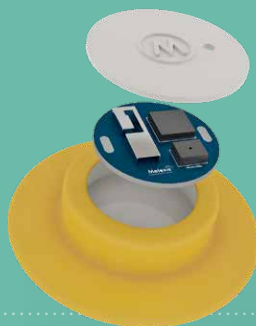
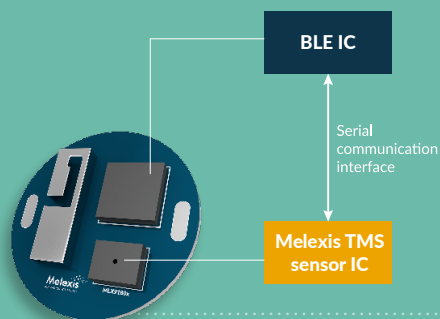
Smart Tire Sensor IC for (E)bike

Experience the future of (E)biking with the MLX91805, a revolutionary Smart Tire Sensor (TMS). Integrating a XZ-axis accelerometer, it provides pressure, temperature, and voltage readings to open new possibilities.

A.I.

Smart Tire Sensor

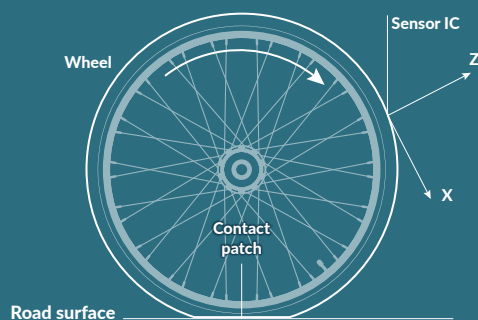
TMS integrated with Bluetooth® technology.



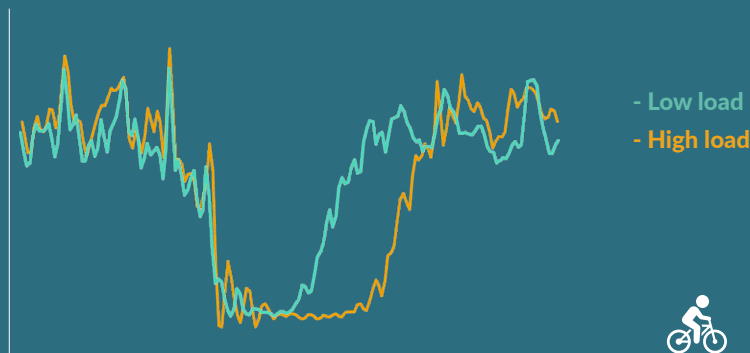
The Bluetooth® word mark is a registered trademark owned by Bluetooth® SIG Inc. and is only used herein to indicate that Melexis's TMS may be compatible with a qualified Bluetooth® enabled chip or module.

Contact patch

Sense the road surface and determine traction, handling, and wear.



Z-axis



Application benefits

✓ Data logging

- Grip assessment
- Road condition detection
- Tailored ride
- Performance optimization
- Puncture detection
- Load estimation
- Imbalance detection

✓ Live reaction

- E-bike range extension
- Alert (Safety, puncture, weather conditions)
- Tire wear reduction
- Effort and comfort management
- Rim protection
- Anti-theft function with movement detection



www.melexis.com/TMS-E-bike