# Monitoring Amusement Park Rides--ASTM F2137-18

### **MicroStrain Wireless Systems application**

**The things we do for fun!** Subjecting ourselves to multiple times gravity in sharp turns, inversion, rolling, climbing hills, and dropping abruptly from heights at great speeds; It's exhilarating and it's fear inducing, It gives us a rush of adrenalin, and it lets us forget everything else in the world, for a couple of minutes.

**Industry Challenge:** Keeping us safe, while scaring the dickens out of us.



**It's a Wild Ride, but it's a safe ride.** ASTM International sets the standard for what is called the Standardized Amusement Ride Characterization Test, or as it's commonly referred to, SARC Test. ASTM standard F2137-18 both specifies the test, and requires rigorous compliance testing of instruments used to monitor those rides.



**The problem:** How do you get instruments to put up with all the stresses that we subject ourselves to? Moreover, how do you get the data? And when...after the ride is over? What if you could get it in real time, while the ride is in process?

#### The Solution: The G-Link-200-R Wireless Accelerometer Node.

The G-Link-200-R is specifically designed to monitor the dynamic characteristics of amusement rides and roller coasters. The wireless sensor is ASTM F2137-18 compliant. An onboard triaxial accelerometer reports highresolution waveform data with extremely low noise and drift. MicroStrain Wireless Sensor Networks enable simultaneous, high-speed sensing and data aggregation from scalable sensor networks. Our wireless sensing systems are ideal for test and measurement, remote monitoring, system performance analysis, and embedded applications.





# G-Link-200-R Application Note: ASTM F2137-18

**Users can easily program** nodes for continuous, or event-triggered sampling with the SensorConnect software. The optional web-based SensorCloud interface optimizes data aggregation, analysis, presentation, and alerts for sensor data from remote networks.





SensorConnect software makes it easy to configure your G-Link-200-R, to set up event based data collection, build custom dashboards, and analyze data for executive reporting.

Sensor Cloud enables you to upload unlimited data for view and analysis anywhere in the world. Share events with colleagues, or use MathEngine to run more complex analyses.







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