

# SmartArm® Sensor Complete System

Real-Time Sensor Data

Control Arm Bushing State Monitoring

Sensor Operation Self-test Detachment Monitoring

Safety Solution for Prognostic Remaining Useful Life

Real Vehicle Data (Future)

Real-Road Condition Data (Future)

## What can Control Arm Monitoring Provide?

Prevents a potential failure mode on control arm monitoring helps determine whether there is a failure through signals generated from the control arm body or bushing.

## What Can Sensor Operation Self-Test & Detachment Monitoring Provide?

SmartArm® Sensor Operation Self-Diagnosis is to check if the sensor module is operating properly. Sensor Operation Self-Diagnosis detects an error in sensor operation immediately and generates a signal. SmartArm® Sensor Disconnection Monitoring checks the attachment of the sensor module attached to the control arm and generates a signal when a disconnection of the sensor module is detected.

# What Can SmartArm® Sensor Provide?

Diagnose the status of the Control Arm through signals from multiple sensors

Monitoring bushing wear conditions

Diagnosis of crack occurrence of control arm and prediction of residual life

Sensor functionality and connection status

Applicable to various types of control arms

OEM and After Market can be applied separately

## SmartArm® Sensor Application

## What is SmartArm® Sensor (CarArm) Application?

The SmartArm® Sensor (CarArm) application is a BLE (Bluetooth Low Energy) application that notifies the driver of an abnormal signal detected through a sensor module attached to the control arm.

# What is SmartArm® Sensor?

It is a safety solution to diagnose failures in the control arm through signals from multiple sensors built into the sensor module, predict the remaining useful life, and ensure the safety of passengers through notifications.

## Sensor Configuration

- 3-axes Acceleration Sensor
- Temperature sensor
- Electric Field Sensor