



# Steering Wheel Sensor

Directly senses operating force to achieve highly accurate measurement!

At first glance, it appears to be an ordinary steering wheel.

Conventional sensor integration increased the wheel size, making it difficult to maintain a standard form. With Tec Gihan's compact, ultra-thin sensors, steering sensing is achieved while preserving the natural design and feel of the wheel.

### Steering Cross-Sectional View

Thin 3-axis force sensors are installed on both the front and rear sides of the slim steering base, featuring curved (radius-shaped) sensing surfaces.



Equipped with high-sensitivity sensors to detect even subtle movements.  
Visualizes the driver's state through force sensing.  
Not only torque, but grip force as well!



A new high-sensitivity, high-resolution operating force sensor equipped with an array of thin 3-axis force sensors.



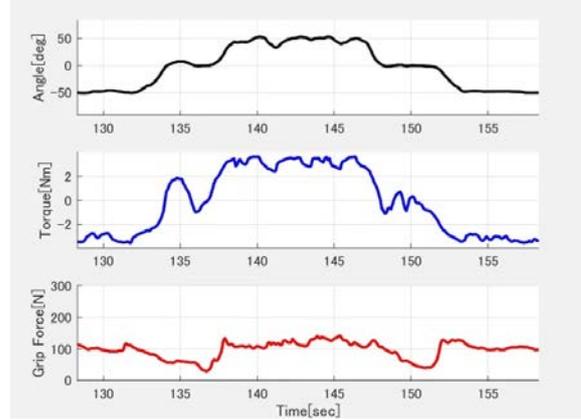
Utilized as an interface for communication between humans and vehicles.

Driver Psychology

Vehicle Performance Analysis

### Advanced Driver Assistance Systems (ADAS) Interface

Grip force and torque are calculated from 20 sensors.



### Application Example (Information Provided by S&VL Inc.)

This steering sensor is available for trial use at S&VL Inc. S&VL provides contract research services using driving simulators, offering comprehensive support from the design of experimental protocols tailored to specific objectives through to data analysis.

### USL06 Series Compact, Ultra-Thin 3-Axis Force Sensor



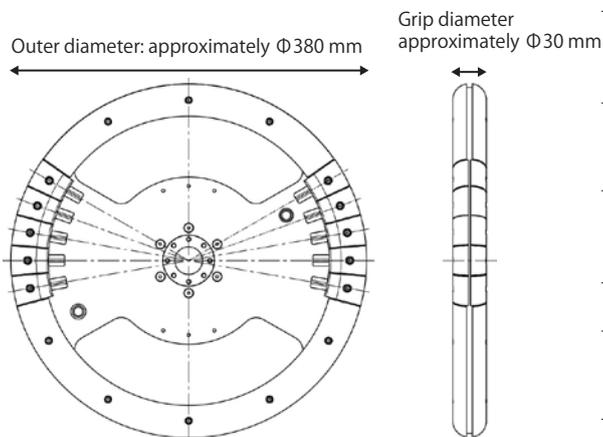
Size : 20×20×5mm  
 Rated Capacity : Fx Fy ±50N  
 Fz +100N  
 ※Fz 100 / 200 / 500 N options are also available.

### Boss 6-Axis Force Sensor (Optional)



Size : 95×95×21mm  
 Rated Capacity :  
 Fx Fy ±500N  
 Fz +1000N  
 Mx My ±30Nm  
 Mz ±15Nm

### Drawings & Specifications



Name	Steering Sensor
Sensor	USL06-H5-100N × 20unit ※Available rated capacities : 50 / 200 / 500 N
Dimensions	Handle diameter : approx. Φ380mm Handle thickness : approx. Φ30mm
Interface	USB connection (digital) BNC connector (analog output ±10V)
Features	ZERO balance function, TRIG (Recording start)
Others	Includes control and measurement software (OS : Win10,11 supported)
Optional Items	Boss 6-axis Force Sensor