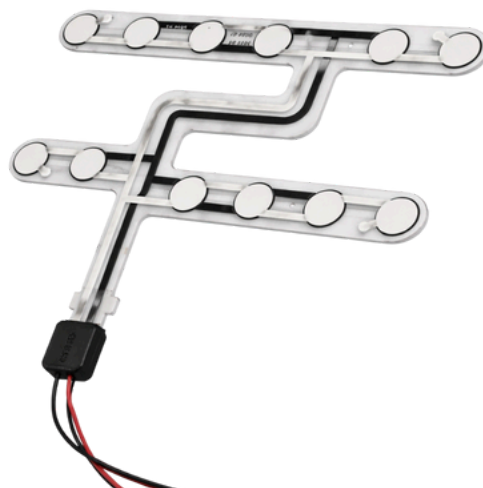# Seat Occupancy Sensor

✦ Description :

The Seat Occupancy Sensor is a high-performance pressure-sensitive device designed to detect and monitor the presence of a person on a seat. Ideal for automotive, office, and public seating applications, this sensor ensures safety, efficiency, and accurate occupancy detection. With its compact design, high stability, and durability, the LP4339 is suitable for integration into smart seating systems, conference halls, theaters, classrooms, and vehicle seating.

✦ Application :

- Car seat occupancy sensor for passenger safety systems

- Chair occupancy detection for office or smart furniture

- Conference hall or theater seat occupancy monitoring

- Smart seating for classrooms and large venues

- Monitoring stadium seating performance

- Seat occupancy monitoring devices in public spaces

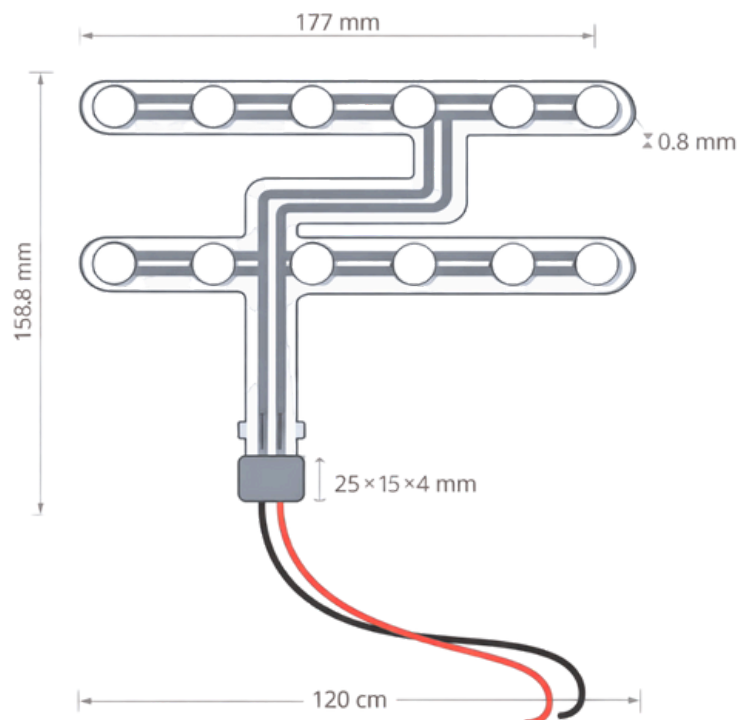- Smart seat pressure detection in automotive and industrial applications

Seat Occupancy Sensor

✦ Feature :

- High sensitivity with a force range of 150g to 500kg

- Compact and customizable design for easy integration

- Low power consumption (<120 mA)

- Fast response time (7 ms) for accurate detection

- Durable and resistant to environmental factors (moisture, wear)

- Lightweight (50g) for minimal impact on seating design

- Wide working temperature range: -20ºC to 80ºC

- Long-lasting performance with over 10,000 operating cycles

✦ Sensor Mechanical Data :

Seat Occupancy Sensor

✦ General Information :

Property	Value
Number of Sensing Points	12
Force Range	150g to 500kg
Working Voltage	< 5V DC
Working Current	< 120mA
Response Time	7 ms
Molded Connector (L×W×T)	25×15×4 mm
Overall Dimension (L×W×T)	177×158.8×0.8 mm
Working Temperature	-20°C to 80°C
Base Resistance	19–23 MΩ
Weight	50 g
High Stability	Resistant to moisture
Durability	> 10,000 cycles
Connecting Wire	120 cm ST 2-pin connector
Country of Origin	India

Seat Occupancy Sensor

✦ **Datasheet Graph :**

Force vs Resistance