










Customized smart touch illuminated panel with gesture control is a feature that allows users to control devices using hand motions like swiping, tapping, and pinching. Gesture recognition is a type of perceptual computing user interface that allows computers to capture and interpret human gestures as commands.

The panel with RGB illumination can be controlled by a gesture device. Additionally, the front facia can be designed to suit the specific application. Integrate the capacitive keys with the required protocol, such as I2c, Uart, TTL, or other protocols as needed.

The Panel size, symbol and key shape can be designed according to requirements.

It can recognize 9 gestures.

1. Left to right 
2. Right to left 
3. Up to Down 
4. Down to up 
5. Clockwise rotation 
6. Counter Clockwise rotation 
7. Forward 
8. Backward 
9. wave 

Features:

1. Gesture Recognition:

- Recognizes 9 gestures.
- Supports swipe, wave, and rotation movements

2. Fast Response Time:

- 60ms detection time
- High accuracy for real-time applications

3. Compact Size:

- 8.0mm × 8.0mm small form factor
- Suitable for portable and embedded systems

4. High Detection Range:

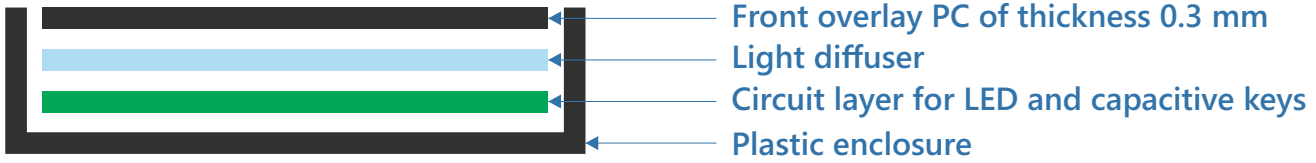
- Operates within 5cm – 15cm distance

5. Ambient Light Immunity:

- Works in various lighting conditions.



Construction Layer Details:



Applications:

1. Touch less UI Control

- Swipe gestures for controlling smart devices
- Virtual buttons for kiosks and digital displays

2. Smart Home Automation

- Gesture-based control for lights, fans, and appliances
- Non-contact control for IoT-enabled devices

3. Gaming and VR Control

- Motion-based gaming interaction
- Gesture-controlled navigation

4. Robotics & Automation

- Human-machine interaction for industrial automation
- Gesture recognition for robotic arms

5. Wearable Devices

- Hands-free control for AR/VR headsets
- Smartwatches with gesture input

6. Automotive

- In-car infotainment gesture control
- Non-contact dashboard navigation

7. Mobile Devices

- Swipe-based smartphone navigation
- Gesture-controlled music playback