

iBW6B - Fully Water-Resistant PCAP Control Interface

Super Water-Resistant, Operates as Usual



PCAP (Projected Capacitive Touch) is currently the most widely accepted touch technology due to its high sensitivity to touch inputs. The surface-strengthened mirror coating further enhances its durability, making it a popular choice despite its slightly higher cost. However, there is a significant drawback: false triggers caused by water splashing on the surface. Many have experienced this issue when using smartphones outdoors in the rain. This problem becomes even more troublesome in household appliances or other devices frequently exposed to water, such as shower controls, kitchen appliances (dishwashers, induction cooktops, coffee makers, etc.), and outdoor equipment (fuel pumps, vending machines, information kiosks, etc.).

In principle, ionic liquids are guided by electric fields, causing positive and negative charges to drift rapidly in a specific direction, which expands touch signals to non-touch areas. To minimize the influence of electric fields (or reduce it as much as possible), equalizing the potential and quickly capturing touch signals can enable accurate touch detection even under water exposure. However, implementing this principle requires extensive experimentation to achieve stable results. The iBW PCAP Touch Platform is iBLab's perfect solution for water-resistant PCAP technology.

Specifications and Features:

- Slim PCAP button design integrated onto PCB
- Flexible layout and size customization
- Provides design guidelines to ensure effective water resistance for PCAP buttons
- Surface materials can be customized (polyester film, wood, metal, plastic, resin, etc.)
- Excellent aesthetic design possibilities
- Superior water resistance
- Interface : I2C / RS232
- Premium quality at an affordable price

Reference to related products

- iBW1651
- iBW589
- iBW664