

For other options, keypads, keyboards or custom configurations please contact EAO Switch directly.

## Product Profile

The Touch Sensitive Keyboard range operates from under a transparent protective screen, designed to resist cleaning agents and fluids, moisture, dirt ingress and damage from shock and impact, making it ideally suitable for a wide range of applications in industrial and public areas.

**Technical drawings see page 98**

- IP65
- Works under polycarbonate or glass up to 10mm thick for certain models
- Adjustable sensitivity
- With or without touchpad
- PS2 or USB connection
- Environment: PS2, Win NT4, 98 SE, ME, 2000 PRO Pack II, XP
- Available in several language layouts
- SCB software included with 74 key unit for design of keyboard and touchpad overlay
- Customization of key functions on 74 key unit using SCB software
- 105 key OEM version supplied with mounting kit
- Custom layouts possible
- Desktop or behind-panel mounting styles

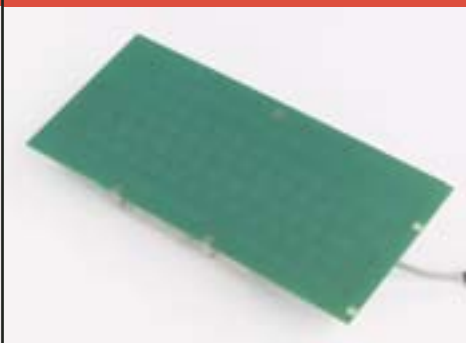
## Rugged touch sensitive touchpad



Touchpad without overlay available with 1 or 2 buttons

Part No.	Output type	Comment
75.00100.U02	USB	1 click
75.00200.U03	USB	2 clicks

## Rugged touch sensitive keyboard



Alphanumeric programmable keyboard, 74 keys on PCB without overlay, cable output, layouts in English, German, French and US English

Part No.	Layout	Output type
75.074K0.S01	English	PS2
75.074D0.S01	German	PS2
75.074F0.S01	French	PS2
75.074U0.S01	US English	PS2
75.074K0.U01	English	USB
75.074D0.U01	German	USB
75.074F0.U01	French	USB
75.074U0.U01	US English	USB

Keyboard mounting kit, part no. 75.00005.K01 is available on request

## Rugged touch sensitive keyboard



Alphanumeric keyboard, OEM version, 105 keys on PCB with overlay, cable output, layouts in English, German, French and US English

Part No.	Layout	Output type
75.105K1.S01	English	PS2
75.105D1.S01	German	PS2
75.105F1.S01	French	PS2
75.105U1.S01	US English	PS2
75.105K1.U01	English	USB
75.105D1.U01	German	USB
75.105F1.U01	French	USB
75.105U1.U01	US English	USB




Alphanumeric keyboard, desktop housing version, 105 keys, cable output, layouts in English, German, French and US English

Part No.	Layout	Output type
75.105K1.S06	English	PS2
75.105D1.S06	German	PS2
75.105F1.S06	French	PS2
75.105U1.S06	US English	PS2
75.105K1.U06	English	USB
75.105D1.U06	German	USB
75.105F1.U06	French	USB
75.105U1.U06	US English	USB


For other options, keypads, keyboards or custom configurations please contact EAO Switch directly.



**Rugged touch sensitive keyboard with touchpad**



Alphanumeric keyboards, integrated touchpad, OEM version, 105 keys on PCB with overlay, cable output, layouts in English, German, French and US English



Alphanumeric keyboard with integrated touchpad, desktop housing version, 105 keys, cable output, layouts in English, German, French and US English

Part No.	Layout	Output type	Part No.	Layout	Output type
75.105K2.S01	English	PS2	75.105K2.S06	English	PS2
75.105D2.S01	German	PS2	75.105D2.S06	German	PS2
75.105F2.S01	French	PS2	75.105F2.S06	French	PS2
75.105U2.S01	US English	PS2	75.105U2.S06	US English	PS2
75.105K2.U01	English	USB	75.105K2.U06	English	USB
75.105D2.U01	German	USB	75.105D2.U06	German	USB
75.105F2.U01	French	USB	75.105F2.U06	French	USB
75.105U2.U01	US English	USB	75.105U2.U06	US English	USB



## Touch-Sensitive Keyboards Overview

### The Technology

Touch-sensitive technology involves the use of high-frequency signals whose amplitude is modified when a key is activated, i.e. when it is touched or skimmed by the user's finger.

A touch-sensitive keyboard consists of three elements:

- a set of keys, on a printed circuit board;
- an interface card;
- a non-conductive front panel (glass, polycarbonate, etc).

Each key circuit features a detector circuit or cell. The detector circuit is protected by an EAO patent. An HF generator sends the HF signal to the keys.

An interface card based around a micro-controller controls all the keys. The keyboard's output signal is transmitted to the PC via a standard PS2 or USB port.

### Principle

Each key on the keyboard consists of a copper area linked to a HF-emitting detector cell. This copper area may be

considered as the armature of a capacitor, with the front panel of the keyboard acting as the dielectric (the non-conductive isolating material).

When a human finger touches the contact area, it acts as the second armature of the capacitor, grounded through the user's body. The body's electrical properties then act as a serial RLC (Resistor-Self-Capacitor) network, diverting part of the HF voltage generated on the key. This drop in voltage constitutes a change in the output state and is detected as such by the micro-controller.

