

PS/2 & Serial Cursor MicroModule — VP5510

Rugged finger-actuated cursor-control pointing module (FSR® VersaPoint® pressure-pointing)



The MicroModule is a compact, finger-actuated “mouse” pointing module that delivers simultaneous 360° control of cursor direction and speed. The user places a fingertip on the central actuator and applies light pressure in the desired direction; increasing pressure increases cursor speed. Built on Interlink’s solid-state Force Sensing Resistor® (FSR®) VersaPoint® technology, it has no moving parts to wear out. Two flanking rubber pads provide left and right click buttons, and the sealable, ultra-thin design integrates into tight panel spaces for rugged mousing applications.

General	
Device type	Finger-actuated cursor-control pointing module (“mouse” module)
Pointing technology	Force Sensing Resistor® (FSR®) / VersaPoint® pressure-pointing — no moving parts
Actuator style	Mouse Button (round disk with a fingertip divot)
Control	Simultaneous 360° direction and pressure-based speed control
Buttons	Integrated left / right click buttons (dual click-button rubber keypad)
Interface	PS/2 — plug-and-play, standard mouse output
Electrical	
Supply voltage	5 V (bus powered)
Operating current	10 mA – 12 mA (typical, full assembly)
Report rate	50 reports / second
Movement data range	X and Y: –127 to +127 counts
Header connector	Molex 53261-0871 wire-to-board header
Mechanical & Environmental	
Weight	15 g or less
Mounting profile	Ultra-thin; blind/panel-mount with integrated sealing rib
Operating temperature	–25 °C to +70 °C (functional before, during and after exposure)
Storage temperature	–40 °C to +85 °C
Thermal shock	Functional after 20 cycles of –40 °C to +85 °C (30 min dwell, 5 min transitions)
Finger-disk durability	> 3.5 million actuations at 500 g, 4 Hz
Keypad durability	> 1 million cycles at 500 g, 4 Hz
Drop test	Dropped from 1 m onto concrete on all six sides
Mechanical shock	Comparable to MIL-STD-202, 80 G accelerated in 11 ms
Mechanical vibration	Comparable to MIL-STD-202, Method 204, Condition A

Chemical resistance	Keypad surface resists common cleaners & spills for 24 h (water, soap, bleach, alcohol, ammonia window cleaner, mild acid cleaner, cola, coffee)
Compliance & Materials	
Flammability	All materials UL grade 94 V-1 or better
RoHS	Compliant

Typical Applications

Rugged mobile computers • hardened keyboards • navigation systems • machine control panels • pan-and-tilt and motion controllers • CNC controllers • medical control equipment.