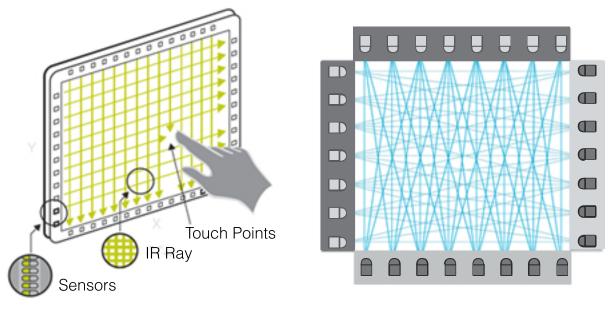


**Surface Light Wave** (SLW) is an innovative multi-touch technology used in Coretouch Panels and IWB. It is offered exclusively by Coretouch in India/ South Asia. It is one of the most advanced multitouch technologies worldwide. Based on the transmission property of light, integrated with the IR emitter of light wave, SLW can formulate a complex and dense light net. When a signal receiving circuit receives the "broken" signal, the processor will analyze it and thus the touch points can be recognized.

SLW is the touch recognition technology used by Coretouch to detect multiple contacts on the touch screen simultaneously. This technology supports from 2 touch points and is expandable up to 32 points. It is fully compatible with Windows, Mac, Linux and Android OS.



Traditional Infrared Touch

Surface Light Wave

## SLW - Real Multi Touch

SLW is a multi-touch technology that can be extended from two up to 48 touch points, according to the customers' requirements. It is also the first multi-touch technology that can support over 32 touch points.

### **Recognize Touch Materials, Support More Extended Applications**

Traditional Infrared Touch (IR) method is based on the X and Y Axis. This way, the processor can only obtain the coordinates. With SLW, the processor can also describe the shape of an object, by using the (extra) light waves across the screen. This is a significant benefit that other technologies cannot compare to. For example, the screen will give you different results when using a finger or a palm touch.

### **Fast Response**

Response time is less than 10ms, which is much faster than most other touch technology.

# Coretouch

### SLW - Advanced Patented Multi-touch Technology

- Supports multi-touch screen from 2 touch points up to 32 touch points
- Palm rejection
- Touch object shape recognition
- Can identify objects of 2 mm thickness (on select models only)
- High Fault Tolerance ( ≤10 %)
- High Redundancy Design: Dust, Business Card Cover workable
- Anti-Strong Light function: Indoor and outdoor
- HID up to 20 touch
- Windows 7 / 8 /10 , Mac, Linux and Android OS compatible
- High response speed ( >100fps / 10ms, >200fps /10ms in Labs )

# **Comparison of SLW Technology**

	Surface Light Wave	Capacitive Touch	Resistive Touch	Infrared Touch	Optical Touch	SAW Touch
Activation	Zero Force Required	Zero Force Required	100 grams	Zero Force Required	Zero Force Required	30 grams
Transmissivity	Very good (> 92%)	Good (~ 88%)	Good (~ 75%)	Very good (> 92%)	Very good (> 92%)	Very good (> 92%)
Physical Resolution (max.)	1,414 x 798 *	1,000 × 1,000*	4,096 x 4,096*	300 x 200*	1,280 x 720	N/A
Report Resolution	32,767 x 32,767	4,096 x 4,096	4,096 × 4,096	4,096 x 4,096	4,096 x 4,096	4,096 x 4,096
Size Detection (min.)	2mm × 2mm *	4mm x 4mm	1mm x 1mm	5mm × 5mm	3mm × 3mm	3mm × 3mm
Movement Detection (min.)	1 mm	1 mm	1 mm	5 mm	3 mm	2 mm
Surface Hardness	7 H	6.5 H	3 H	7 H	7 H	7 H
Environmental Robustness	High Fault Tolerance	Sensitive to Scratch	Sensitive to Scratch	Very Low Fault Tolerance	Dead Zones due to Surface Contamination	Sensitive to Dust or Other Foreign Matter
Simultaneous Touch Points	Up to 48 Points	Up to 10 Points	2 Points (max.)	2 Points (max.)	90% of Area: 2 Points, 10% of Area: 1 Touch	2 Points (max.)
Calibration	No Drift	Recalibration due to Drift	Periodic Recalibration Required	No Drift	No Drift	Periodic Recalibration Required
Operating Current (typical)	< 275 mA	< 50 mA	< 100 uA	< 300 mA	< 300 mA	N/A
Response Time	≤ 10 ms	+	10 ms	16 ms	12 ms	10.5 ms
Scan Rate	100 ~ 200 Frames/ sec.	> 90 Frames/sec.	100 Frames/sec.	60 Frames/sec.	90 Frames/sec	. 95 Frames/sec.
Interference Rejection	Immune to Sunlight & Static Charge	Degradation due to Temperature, Humidity, Wet Finger	Periodic ReCalibration due to Drift	Degradation due to Sunlight , 30+ Degree Touch Angle needed	Degradation due to Ambient Light	Interference by Foreign Matter
Operational Life	Long	Long	Short	Long	Moderate	Moderate
Touch Method	Finger, Pen or Opaque Object	Finger Required	Finger, Pen or Opaque Object	Finger, Pen	Finger, Pen	Finger, Pen
Available Sizes	15 inch ~ 200 inch	< 21.5 inch	< 19 inch	19 inch ~ 100 inch	15 inch ~ 120 inch	10 inch ~ 32 inch

#### **Experience Centre**

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