MARS

MULTI-TOUCH ANALOG RESISTIVE TOUCH TECHNOLOGY

Putting a new spin on resistive technology, Touch International's MARS (multi-touch analog resistive sensor) Technology offers multi-touch capabilities for applications requiring pressure sensing touch screens with flexibility in construction, design and performance.

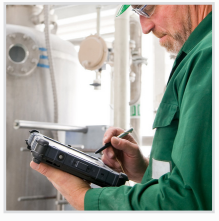
AT A GLANCE

- Multi-touch Capable
- Finger, Glove and Pen Input
- True Touch with Gesture and Palm Rejection
- Durable Against Chemicals & Contaminants
- Accurate, Fast Touch Response
- Hardware & Firmware Modification to meet EMI/ RFI Standards
- Windows 7 Compatible

Featuring superior drift-free performance with fast and accurate response time, MARS technology supports up to 10-finger touch with true touch gesture and palm rejection. Accepting bare or gloved fingers or pointing device input, this multi-touch resistive technology is ideal for applications in the military, aerospace, industrial and retail fields.

APPLICATIONS

Aerospace Systems



Industrial Equipment

Medical Instrumentation

Military Equipment

Signature Capture

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AS9100

SPECIFICATIONS

Optical	Light Transmission:	80% (Typical) 88% (Possible)
Electrical	Input Method:	Finger, Glove or Stylus
	Operational Voltage:	D.C. 6V
	Linearity:	+- 2% (Typical)
	Chattering Time:	10 msec or less
	Communication:	Serial or USB
Mechanical	Surface Hardness:	3H to 4H (ASTM)
	Touch Activation Space:	.05N ~ .8N
	Response Times:	< 10ms
Environmental	Operation Temperature:	-15 C ~ 70 C, Non-Condensing
	Storage Temperature:	-40 C - 85 C, Non-Condensing
	Operating Humidity:	-20 C to 60 C - Less than 90% RH, Non-Condensing Exceeding 60 C 133.8g/m3, Non-Condensing
	Storage Humidity:	-40 C to 800 C - Less than 90% RH, Non-Condensing Exceeding 60 C 142.9g/m3, Non-Condensing
	Touch Durability:	10 Million Touches in a Single Location (Finger) 100,000 Touches in a Single Location (Character Input - Pen)
	Chemical Resistance:	Tested for Resistance to Toluene, Alcohol, Gasoline, Machine Oil, Ammonia, etc.

HOW IT WORKS

Multi-touch is based on technology that enables a pointing device or finger to sense through a protective screen in front of the display. When touched, a capacitance forms between the finger or pointing device and the touch screen. The embedded serial or USB controller in the touch screen calculates the touch location, coordinates and transmits them to the computer for processing. The construction of MARS is similar to that of regular resistive, and is essentially a 4-wire resistive sensor cut up into many small 4-wire touch screens. Unlike traditional resistive, however, MARS is made up of an X-Y grid which is scanned. The advantage of this technology is that it provides multi-touch abilities, while still allowing for input from any pointing device because it is pressure sensitive.