

# AccuTouch Five-Wire Resistive Touchscreens

For Human-Machine Interface

**AccuTouch touchscreens, the proven market leader in five-wire resistive technology, are the preferred solution for applications that demand reliability, input flexibility, and contamination resistance.** AccuTouch resistive touchscreens, with proprietary Elo Touch Solutions technology, deliver a touch response that is drift-free and accurate in high-use applications. Compare the five-wire design of AccuTouch, where both X and Y measurements are made on a stable rear glass layer where other resistive touchscreen designs use a flexing plastic cover-sheet to measure only one axis. As a result, AccuTouch resistive touchscreens provide a longer product life backed by a five-year warranty—withstanding more than 35 million touches versus the one-year warranty typical with shorter life four and eight-wire touchscreens from other manufacturers. AccuTouch touchscreens can be sealed against contamination to support NEMA 4/4x/12 and IP65 standards. AccuTouch touchscreens are the ideal solution for point-of-sale (POS), voting machines, industrial automation, medical equipment, retail, office, and pharmacy automation.

AccuTouch touchscreens are available in four configurations: improved, enhanced, true-flat and Zero-bezel. With improved and enhanced AccuTouch touchscreens, a flat flexible cable is soldered to the glass. AccuTouch true-flat and Zero-bezel touchscreens use a flexible printed circuit cable that virtually elimi-

nates the cable attachment bump that is typical on most resistive touchscreens and enable a smooth, flat integration.

## Benefits

- Stable, drift-free operation
- Broad input flexibility
- Contamination resistance
- Accuracy in high-use applications
- Can be sealed to support NEMA 4/4x/12 and IP65 standards upon integration
- Flat-cable attachment for seamless integration
- 3H, 4H pencil hardness resists scratching

## Applications

- Point-of-sale (POS) terminals
- Voting machines
- Industrial automation
- Medical equipment
- Office automation
- Retail automation
- Pharmacy automation

# AccuTouch Five-Wire Resistive Specifications

## MECHANICAL

Input Method	Finger, gloved hand, or stylus activation
Available Sizes	5.7" to 24.0"

## ELECTRICAL

Positional Accuracy	Standard deviation error is less than 0.080 (2mm)
Resolution	Touchpoint density is based on controller resolution of 4096 x 4096
Touch Activation Force	Typically less than 4 ounces (113 grams)
Controller	Board: Serial (RS232) and USB Chip: Serial (RS232) and USB

## OPTICAL

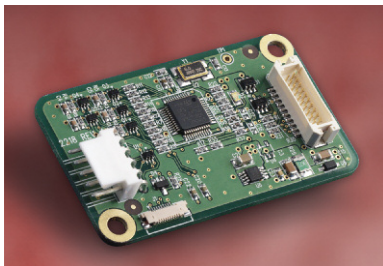
Light Transmission	HL products: 80% ±5% at 550nm wavelength
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## ENVIRONMENTAL

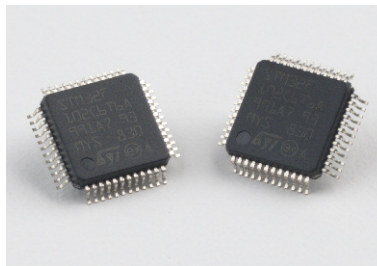
Temperature/ Relative Humidity	Operating: AccuTouch enhanced, AccuTouch true-flat, AccuTouch Zero-bezel—90% RH at 122°F (50°C) max AccuTouch improved—90% RH at 140°F (60°C) max Storage: AccuTouch enhanced, AccuTouch true-flat, AccuTouch Zero-bezel—90% RH at 122°F (50°C) max for 240 hrs, non-condensing AccuTouch improved—90% RH at 140°F (60°C) max for 240 hrs, non-condensing
Altitude	Operating: 10,000 ft (3,048m) Storage/transport: 50,000 ft (15,240m)
Chemical Resistance	Industrial chemicals: acetone, methylene chloride, methyl ethyl ketone, isopropyl alcohol, hexane, turpentine, mineral spirits, unleaded gasoline, diesel fuel, motor oil, transmission fluid, antifreeze. Food-service chemicals: vinegar, coffee, tea, grease, cooking oil, salt, plus most commercial cleaners including ammonia-based glass cleaner and laundry detergent.
Electrostatic Protection	Per EN 61000-4-2, 1995: Withstands 20 discharges up to 15kV
Agency Approvals	UL, cUL, TÜV, CE, FCC Class A
Sealability	Can be sealed to meet NEMA 4 and 12 and IP 65 standards

## DURABILITY

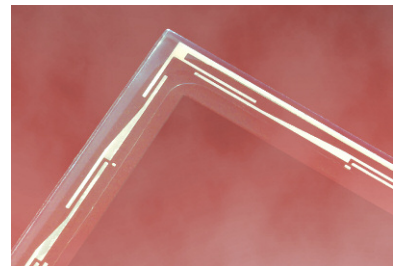
Surface Durability	AccuTouch enhanced, AccuTouch improved: meets pencil hardness 3H per ASTM D3363 AccuTouch true-flat, AccuTouch Zero-bezel: meets pencil hardness 4H per ASTM D3363
Expected Life	Operationally tested to 35 million touches in one location without failure
Warranty	Touchscreen: 5-year limited warranty Controller: 5-year limited warranty



2218 combo controller board



COACH V combo controller chip



Z-border pattern for enhanced linearity