

## SpotSee™ Tilt Indicators

When you are shipping networking equipment and electronics, glass and mirrors, or other equipment sensitive to tilt, you need something more than just a “This End Up” label.



### Tilt Indicators Overview

SpotSee tilt indicators detect unacceptable tilting on goods that must remain upright. When these indicators are used, the product cannot be tipped without indisputable evidence of mishandling.



#### TiltWatch® XTR

The TiltWatch XTR is a single-use tip indicator used to monitor goods that must remain upright. When attached to a package, the TiltWatch XTR turns red if the package is tilted past 80°. The patented design ensures that the indicator remains unaffected by movement due to normal handling conditions or random vibrations.

#### TiltWatch® Plus

TiltWatch Plus indicates whether there has been tilt to the left or right, the degree of the tilt, or if complete overturn has occurred.

### Benefits

- Reduces mishandling during transportation or storage
- Provides indisputable evidence of mishandling
- Alerts recipient to inspect contents before acceptance
- Promotes chain of accountability for all product handling
- Confirms effectiveness of packaging
- Helps identify trouble spots in supply chain, from production to transportation and storage
- Helps increase quality of product from dock to dock



## SpotSee Tilt Indicators

Product Selection Guide	TiltWatch XTR	TiltWatch Plus
Sensor type	Steel disc, non-metallic	Glass balls
Arming method	Remove adhesive backing	Remove adhesive backing
Serialized barcode	Yes	Yes
Indicates tilt direction	No	Yes
Indicates degrees of tilt	No	Yes
Inversion indicator	No	Yes
Activation angle	Greater than 80°	30° with 10° increments to 90°

### TiltWatch XTR Specifications

Monitoring range	Single plane
Tolerance	±5° at 20°C / 68°F, 1 ATM
Operating temperature and humidity	-40°C to 60°C / -40°F to 140°F 5-99% RH, non-condensing
Adhesive	2 mil high tack acrylic
Adhesive shelf life	2 years
Composition	Rigid polystyrene housing with non-magnetic steel indicator
Dimensions	2.92in x 2.37in x 0.21in / 74.27mm x 60.31mm x 5.29mm
Weight	~14.17g
Installation	Pressure-sensitive adhesive or holes to accommodate screws, nails, or staples
Customization	Private logos available Minimum quantity applies

### TiltWatch Plus Specifications

Monitoring range	Single plane and rollover
Tolerance	±5° at 20°C / 68°F, 1 ATM
Operating temperature and humidity	-40°C to 60°C / -40°F to 140°F 5-99% RH, non-condensing
Adhesive	Vinyl acetate copolymer
Adhesive shelf life	1 year
Composition	Clear PVC housing and glass indicator
Dimensions	4.6in x 4.6in x 0.3in 116.84mm x 116.84mm x 7.62mm
Weight	~15.30g
Installation	Pressure-sensitive adhesive exposed when liner and arming pin are peeled away

