



# TiltWatch XTR QR Tilt Indicator

- 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

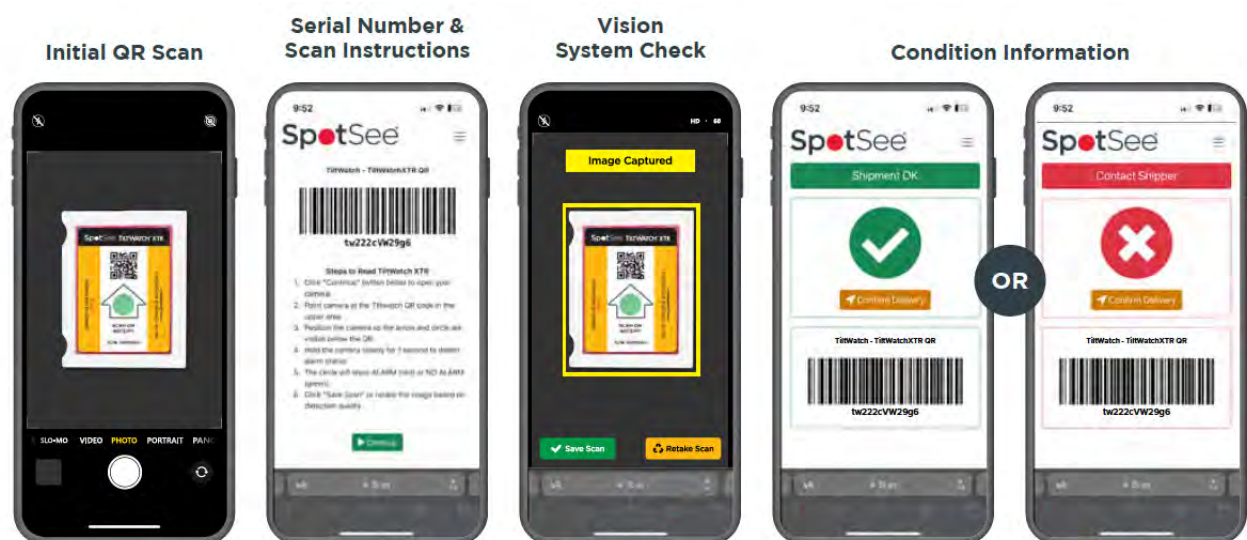
When you are shipping networking equipment and electronics, glass and mirrors, or other equipment sensitive to tilt, you need something more than just another 'This End Up' label.

TiltWatch® XTR QR 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.

When attached to a package, the TiltWatch® QR 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® XTR QR is a single-use, battery-less, connected tilt sensor enabled by smart phone cameras to seamlessly determine if a tilt event has occurred and reports this condition along with time, date, location, and serial number to the SpotSee cloud. SpotSee's cloud platform displays individual sensor information and high-level condition insights to aid shipping and quality improvements.



## Applications

- Liquids that must remain upright, including chemicals, lubricants, and coatings
- Sealed containers with orientation requirements to prevent leaks or contamination
- Refrigeration and HVAC units that rely on upright positioning for proper function
- Compressors, pumps, and motors that can be damaged by improper orientation
- Large batteries and energy storage systems that require stable positioning
- Transformers and heavy electrical equipment sensitive to tilt during transit
- Industrial machinery with fixed internal components or fluids
- Server racks and data center equipment that must stay vertical
- Gas cylinders and pressurized containers requiring upright handling
- Automotive components such as engines, transmissions, and fluid-filled systems
- Laboratory and manufacturing equipment with calibrated internal alignment
- Furniture or assembled goods that can shift or weaken if tipped
- Crated equipment with center-of-gravity constraints
- Fragile goods where tilt can cause internal stress or breakage
- Palletized loads that are stretch-wrapped and risk collapse if tilted

## TiltWatch XTR QR 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	2mm high tack acrylic
Adhesive Shelf Life	2 years
Composition	Rigid polystyrene housing with non-magnetic steel indicator
Dimensions	74.27mm x 60.31mm x 5.29mm
Weight	~14.17g
Installation	Pressure-sensitive adhesive or holes to accommodate screws, nails, or staples
Customisation	Private logos available. Minimum quantity applies
Sensor Type	Steel disc, non-metallic
Arming Method	Remove adhesive backing
Serialised Barcode	Yes
Indicates Tilt Direction	No
Indicates Degree of Tilt	No
Inversion Indicator	No
Activation Angle	Greater than 80°



TiltWatch XTR QR Tilt Indicator with Companion Label