

## ShockWatch Impact & Tilt Indicators



ShockWatch provides a variety of impact and tilt indicators for packaging to give you that extra peace of mind that your package will be handled with care in the supply chain. Impact Indicators have been shown to reduce damage by up to 60%.

### Impact Indicators

A ShockWatch® impact indicator is a highly visible device that will activate when an impact exceeds a predetermined level. Mounted on a shipping box/container, the device visually alerts everyone involved in the package handling process that additional care is required. There are several types of ShockWatch impact indicators for use in the supply chain.



#### ShockWatch RFID

A go/no-go device fitted with a passive RFID chip which can be scanned with any standard RFID reader that will indicate if products have been mishandled during transit or in storage. The indicators are field armable, tamperproof and turn red when an impact beyond a specific threshold has occurred.



#### ShockWatch 2

A single-use, go/no-go devices that determines if fragile products have been dropped during transit or in storage. The indicators are field-armable, tamperproof devices that turn bright red when an impact beyond a specific threshold has occurred.



#### ShockDot

Tamperproof mechanically activated devices, ShockDot indicators turn red when a potentially damaging impact occurs. Each indicator is serialized and ensures the user that the device has not been switched during transport.



#### ShockWatch Label

A single-use tamperproof device, available in five sensitivities. Designed around a proprietary tube that can also be affixed directly to a package, the Label is ShockWatch's flagship device.



#### MAG 2000

A resettable, reusable indicator intended for large crates and shipments weighing over 500 pounds. MAG 2000 records the direction and angle of impact.

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	ShockWatch 2 RFID	ShockWatch 2	ShockDot	ShockWatch Label	MAG 2000
<b>Sensitivity range</b>	5G - 75G	5G - 75G	25G - 100G	25G - 100G	0.5G - 20G
<b>Duration</b>	0.5-50ms	0.5ms - 50ms	0.5ms - 50ms	0.5ms - 50ms	0.5ms - 50ms
<b>Tolerance</b>	± 15%	± 15%	± 15%	± 15%	± 10%
<b>Operating temperature</b>	-13°F to 176°F -25°C to 80°C	-13°F to 176°F -25°C to 80°C	-13°F to 176°F -25°C to 80°C	-13°F to 176°F -25°C to 80°C	-4°F to 140°F -20°C to 60°C
<b>Armability</b>	Armable	Armable	Live	Live	Armable
<b>Security</b>	Tamperproof / Serialized	Tamperproof / Serialized	Tamperproof / QR Code / Serialized (optional)	Tamperproof / QR Code / Serialized (optional)	Tamper-resistant, Resettable with key
<b>Shelf life</b>	2 years	2 years	2 years	2 years	2 years
<b>Size</b>	1.69in x 1.69in x 0.25in 42.93mm x 42.93mm x 6.35mm	1.69in x 1.69in x 0.25in 42.93mm x 42.93mm x 6.35mm	3.8in x 3.8in 96.52mm x 96.52mm	3.8in x 3.8in 96.52mm x 96.52mm	2.5in x 2.4in x 0.79in 63.5mm x 60.96mm x 20mm

## Tilt Indicators

SpotSee tilt indicators detect and record 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

Turns red if there has been tilt past 80°. However, it remains unaffected by movement due to normal handling conditions.



### TiltWatch® Plus

Indicates whether there has been tilt to left or right, the degree of tilt, and/or if complete overturn has occurred.

	TiltWatch XTR	TiltWatch Plus
<b>Part Number</b>	24101	24114
<b>Sensor type</b>	Steel disc, non-magnetic	Plastic balls
<b>Arming method</b>	Remove adhesive backing	Remove adhesive backing
<b>Serialized</b>	Yes	Yes
<b>Indicates tilt direction barcode</b>	No	Yes
<b>Indicates degrees of tilt</b>	No	Yes
<b>Inversion indicator</b>	No	Yes
<b>Activation angle</b>	greater than 80°	10° increments (from 30°)



The ShockWatch Label contains Ethylene Glycol a chemical known to the state of California to cause birth defects or other reproductive harm. For more information go to [www.p65warnings.ca.gov/product](http://www.p65warnings.ca.gov/product).

**SHOCKWATCH®**