



TiltWatch RFID Tilt Indicators

- **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**

TiltWatch RFID enabled condition monitoring indicators allow you to extend the power of your RFID system by integrating handling conditions into your systems. When goods pass through an RFID gate, you will know if the package has been exposed to potentially damaging conditions.

Converting indicator state into electronic form allows you to eliminate the need for visual inspection of indicators upon receipt which speeds the receiving process.

TiltWatch RFID delivers the benefits of a monitoring program for damage reduction, supply chain process refinement and cost reductions – plus

an electronic record of where issues are occurring. With data, it is possible to identify trouble spots in the supply chain and implement process changes to improve outcomes.

TiltWatch RFID indicators are passive RFID (battery free) devices that can be read with any standard UHF reader.

Benefits:

- Acts as a visual deterrent to mishandling
- Expands the utility of RFID with damage monitoring
- Reduces receiving times and isolates items that need inspection
- Helps identify trouble spots in the supply chain – from production to transportation to storage





TiltWatch RFID 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

Reading TiltWatch RFID

Configure the reader to read address 0x21(33) in the standard EPC memory bank.

```
// 1. Select EPC memory bank (bank 1)
x.MemoryBank = MemoryBank.Epc;
```

```
// 2. Point to address 21h in EPC memory bank
x.WordPointer = 33;
```

```
// 3. Say how many bits to read
x.WordCount = 1;
```

```
// 4. Do the actual read operation settings.
Report.OptimizedReadOps.Add(x);
```

If the bit is **8104**, the indicator has been triggered.

If the bit is **8114**, the indicator has not triggered.