WarmMark QR - Instructions for Use

WarmMark QR is a single-use, battery-less, connected time-temperature sensor enabled by smart phone cameras to seamlessly determine if a condition (i.e. temperature) excursion 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.
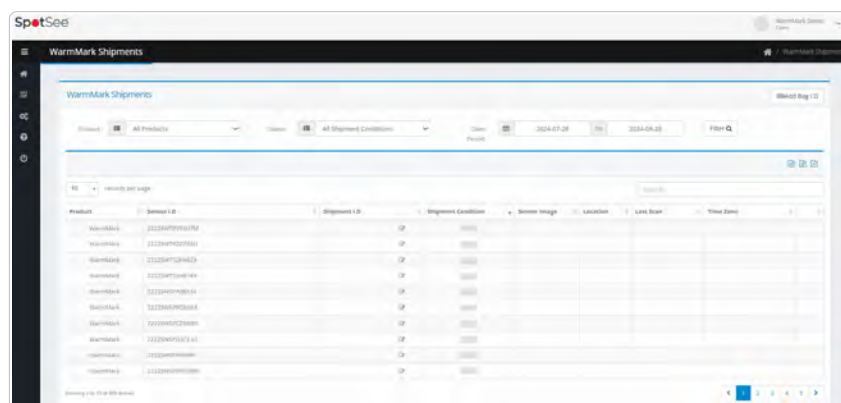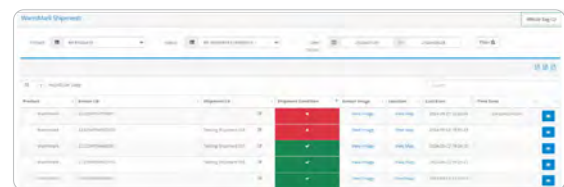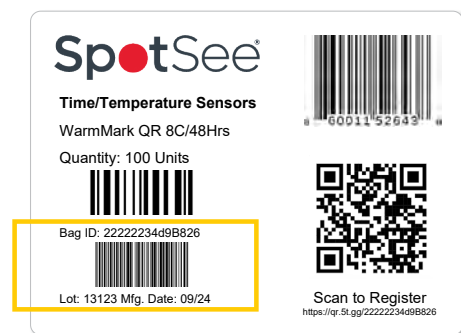
Adding Sensors to Cloud

When first receiving WarmMark QR sensors, locate the bag label on each 100 pack.

Mobile Phone:

- Scan the QR code with your mobile device

- Log in to, or register for, a SpotSee cloud account

- Navigate to the WarmMark Shipments page, and select "Add Sensors" located in the top right corner

- When added with mobile device via QR code on bag label, bag IDs will automatically populate into cloud

Computer:

- Log in to, or register for, a SpotSee cloud account

- Navigate to the WarmMark Shipments page, and select "Add Sensors" located in the top right corner

- Type or scan the bag ID(s) associated with the bags of sensors you need to add to your cloud

Making Ready and Deploying WarmMark QR

Storage:

Store WarmMarks below their response temperature and below 55% relative humidity for optimal shelf life.
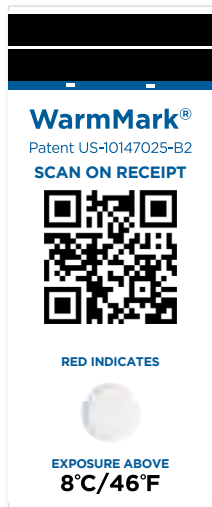
How to Use:

1. All WarmMark® breach windows should be white prior to arming the device.

2. Before arming, the WarmMark indicator should be placed in an environment at least 5°C (9°F) below the WarmMark's activation threshold temperature for a minimum of 30 minutes. This process is known as pre-conditioning.

3. To arm the WarmMark indicator, fold up and pull out the indicator's activation tab until the tab and barrier film have been completely removed.

4. If using a WarmMark indicator with an activation threshold temperature below the ambient temperature, immediately place the indicator in the environment to be monitored to avoid activation.

5. Remove the adhesive liner (if desired) from the WarmMark and adhere the indicator to a clean, dry surface.
    a. The WarmMark should be located where it will be visible to the receiver of the monitored shipment.
    b. The WarmMark can be adhered directly to the product being monitored or located inside the packaging.

6. Run-out time is the maximum time it takes the pink/red color to appear in the window of the tag at a constant 2°C above threshold temperature.

WarmMark QR Serialization

Every WarmMark QR is uniquely serialized for tracebility in the cold chain. Should you need to record the sensors serial number prior to shipment, simply scan the QR code with a mobile phone or handheld mobile computer camera. Then, either type or scan directly off your device screen to transfer the serial number to an invoice or shipping software to tie the WarmMark to the asset being shipped.

As the shipper, the serial number and barcode are likely of the most interest, but the bottom half of this screen also displays the instructions which the receiver of the shipment will see and follow to properly read the WarmMark QR.

Used by shipper to record sensor serial number, if desired, prior to shipment

Instructions read by the receiver of the shipment to properly check condition of the WarmMark sensor

WarmMark®
Patent US-10147025-B2
SCAN ON RECEIPT

RED INDICATES

EXPOSURE ABOVE
8°C/46°F

SpotSee

Product: WarmMark

22223WTN7Y9B9T

1. Click "Continue" button below to open your camera.
2. Place the WarmMark inside the black box and adjust until the box turns yellow.
3. Once box is yellow, hold for 1 second to auto capture an image.
4. Click "Save Scan" to check sensor condtion.

▶ Continue