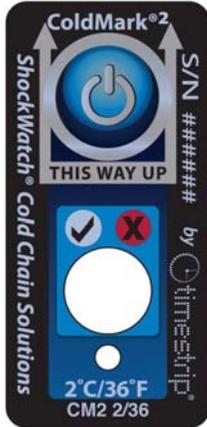


ShockWatch[®] ColdMark^{®2} Descending Temperature Indicator



Simple cold chain monitoring solutions that keep your supply chain on track

ColdMark² is the world's first field armable, descending temperature indicator that provides superior upfront savings by eliminating the need to ship or store the indicator in a heated environment.

Applications

- Pharmaceutical preparations
- Vaccines
- In vitro and in vivo diagnostics
- Biological products
- Medicinal chemicals and botanicals
- Prepared and raw refrigerated foods
- Fresh foods
- Wine
- Raw industrial materials
- Industrial chemicals
- Films
- Live animals

Summary of Features

Feature	Benefit/Details
Field activated	Can be shipped & stored under most conditions
Individually serialized	Allows product tracking for internal handling and chain of custody
Highest accuracy on the market	Tested in both real world applications as well as a lab environment
Available in rolls	Allows for rapid application if needed
Water submersion proof	Moisture conditions can't stop it from working accurately
Standard & custom sensitivities available	Complete flexibility for customer requirements

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A Low-Cost, **Highly Accurate** Solution to Critical Cold Chain Problems

A single-use indicator, ColdMark² is specifically designed to help shippers identify and correct gaps in their biomedical, pharmaceutical, and food product cold chains. The result is increased knowledge of your product's environment when it is out of your sight and out of your control and that translates into improved product margins by:

- **Protecting product shelf life**

Best-in-class accuracy (precise to +/- 1°C, with 1.5°C temperature trigger) enables ColdMark² to provide a highly visible, easy-to-read indication that your product has been handled and stored properly throughout the cold chain – allowing your customers and their end-users to determine that its shelf-life has not been diminished by temperature breaches.

- **Ensuring validate packaging is performing**

Validated packaging is an ideal solution when shipping the same product in the same lanes all the time, but what happens if something happens to the packaging? A corner is crushed, a small hole is made in the bottom of the box, is the product still acceptable? Would an auditor find it acceptable? ColdMark² delivers an inexpensive option for added peace of mind.

- **Reducing shipping costs**

In addition to reducing your costs for special shipping and storage of the indicators themselves, ColdMark² indicators can be applied to your existing thermal packaging to provide superior product monitoring without expensive re-engineering. And the tags can be applied via time- and labor-saving automated methods, eliminating costly manual processes in high volume scenarios.

Unique Features



- 1 Push “power” button to activate
- 2 Unique identifier
- 3 Indicates the device is armed
- 4 Turns **red** when exposed past threshold
- 5 Temperature sensitivity
- 6 Part number



Key Specifications

Temperature Threshold	1.5°C
Accuracy	+/- 1°C
Activation Time	30 minutes or less
Operating Temperature Range (Activated State)	-20°C to 22°C
Product Life	Two years from date of manufacture
Ambient Transient Transport Temperature (Prior to Activation)	-20°C to 55°C
Long Term Storage (Prior to Activation)	5°C to 32°C

See ColdMark² data sheet for complete list of specifications.

Learn from the Experts

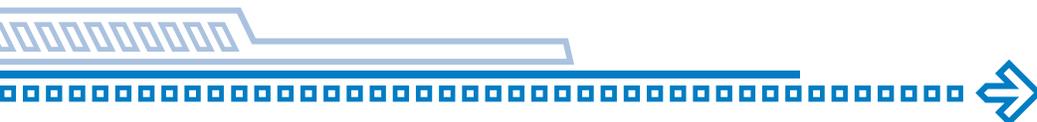
ShockWatch is a global leader in the innovation and optimization of logistics and cold chain risk mitigation. In addition to providing leading-edge products and systems, ShockWatch consultants, subject matter experts and training staff partner with customers to help them:

- Ensure proper implementation and effective long-term usage of ShockWatch systems
- Optimize their investment for an improved bottom line
- Maximize understanding of conditions that affect products during transit and in operation

Put the ShockWatch Advantage to Work for You

Whether monitoring the entire cold chain or simply the last mile, ColdMark² Descending Temperature Indicators can help you streamline your processes, reduce costs, increase customer satisfaction, and protect your bottom line by identifying product mishandling which may negatively impact product efficacy and your company's reputation.

Learn how to use the ColdMark² in optimizing your cold chain monitoring program by contacting us at info@shockwatch.com or contact your ShockWatch representative by visiting www.ShockWatch.com/ColdMark2



A Complete Portfolio of Monitoring Devices

ColdMark² is part of a complete line of temperature monitoring devices available from ShockWatch. Below is a short comparison of additional products that may help you in your monitoring needs.

Indicators ColdMark ^{®2} WarmMark ^{®2}	Electronic Indicators TempMark ^{® 8}	Recorders TrekView [®]
Single temperature threshold devices	8 temperature alarm threshold devices	
Simple go/no-go chemical indicator	Records number & longest duration of single excursion, cumulative time out of tolerance for 8 alarm conditions	Records temperature every minute for up to three (3) years Graphing & analysis software (FDA 21 CFR Part 11 Compliant)
Single use device	Single use device	26x use device
-20°C to 38°C	-20°C to 70°C	-30°C to 75°C
Visual color change	Liquid crystal display	Red/green LED Data access: Wireless or USB



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About ShockWatch

As the global leader in the innovation and optimization of logistics and cold chain risk management systems, ShockWatch provides solutions that currently enable over 3000 customers and some 200 partners in 62 countries to detect mishandling that causes product damage and spoilage during transport and storage. The robust ShockWatch product portfolio includes impact, tilt, temperature, vibration, and humidity detection systems and is widely used in the energy, transportation, aerospace, defense, food, pharmaceutical, medical device, and manufacturing sectors.

Founded in 1976 and based in Dallas, Texas, ShockWatch is a subsidiary of MRI, Inc., which is also the parent of DPC and DataSpan. MRI's international client base includes two-thirds of the Fortune 100 and more than half of the Fortune 1000 companies.

For more information on ShockWatch position on RoHS, EU Directive 2002/95/EC, Amendment Commission Decision 2005/618/EC, and our certificates of compliance, please visit www.shockwatch.com.