



Introduction

TrekView is a cost-effective temperature recorder that indicates if your product has been exposed to unacceptable temperatures that could negatively affect product quality or safety. TrekView Tags can be tailored for specific applications such as monitoring product core temperatures with a stainless steel probe, or inside validated packaging with a ribbon cable, or extreme cold with a dry ice probe.

FEATURES
Captures data every 60 seconds
Up to eight temperature alarm thresholds
USB and RF interfaces on every recorder
Manage tags and create reports with TrekView Data Management System (web-hosted) or TrekView Desktop Software

Contents

TrekView Specifications	2
Best Practices for Placement	3
Accessories and Related Products.....	4
TrekView Desktop & Handheld RF Readers.....	4
TrekView Data Management System (DMS) & TrekView Desktop Software	4
TrekView DMS Requirements	4
TrekView DMS Host Specifications.....	5
TrekView Desktop Software System Requirements	5
Ordering Information.....	5
Technical Support	5
Warranty	5
Limitation of Liability.....	6
Appendix A – How to Use TrekView Recorders.....	7
Appendix B – TrekView Battery Specifications.....	8



TrekView Specifications

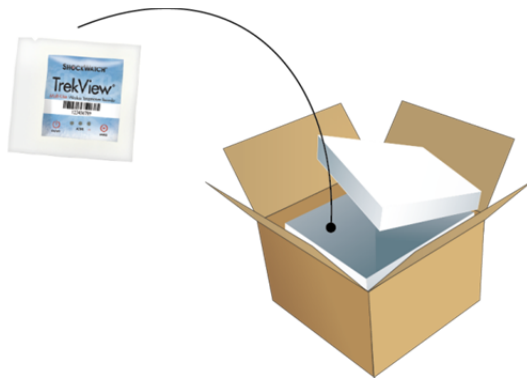
TrekView Key Specifications				
	Standard (No Probe)	Ribbon Probe	Stainless Steel Probe	Dry Ice Probe
Temperature Measurement Range	-30°C to 75°C -22°F to 167°F	-30°C to 75°C -22°F to 167°F	-30°C to 75°C -22°F to 167°F	-80°C to 75°C -112°F to 167°F
Temperature Accuracy				
-70°C to -30°C	N/A	N/A	N/A	± 3°C
-30°C to 75°C	± 0.5°C	± 1°C	± 1°C	± 1°C
-112°F to -22°F	N/A	N/A	N/A	± 6°F
-22°F to 167°F	± 1°F	± 2°F	± 2°F	± 2°F
Threshold Settings	8 configurable excursion thresholds			
Temperature Resolution	0.1°C			
Memory Capacity	4000 logged data points / 16 million histogram temperature readings (histograms can be viewed with the TrekView Handheld Reader and TrekView Desktop Software)			
Sampling Interval	1 sample per minute			
Logging Interval	User-programmable			
Programming	Tags can be sent with a pre-programmed configuration, or they can be configured by the customer.			
Data Retrieval	External or Internal USB plus RF			
Wireless Technology	Semi-passive RFID			
Download Time	0.5 seconds			
Packaging	Water-resistant (NEMA 4) food-grade packaging			
Product Size	2.28 x 2.28 x 0.07in 5.79 x 5.79 x 0.17cm			
Cable Length	N/A	24in 60.96cm	24in 60.96cm	24in 60.96cm
Weight	External USB 16.33g Internal USB 10.43g	19.50g	10.44g	19.50g
Battery Life	Up to 3 years in "Recording" or "Standby" mode (See Appendix B for battery specifications)			
Number of Uses	Up to 26			
Calibration	Factory-calibrated to 3-Point NIST certification. Certificate of validation is provided for every unit.			
Communications	USB and RF interfaces			
Compliance	TrekView Data Management System: 21 CFR Part 11 TrekView Desktop Software: 21 CFR Part 11 (Reports only)			

Best Practices for Placement

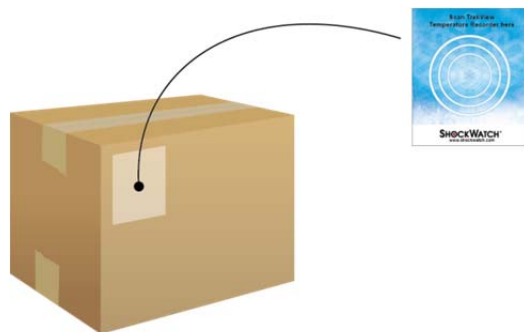
TrekView tags are compact and durable. They can be used whenever a complete temperature history or temperature breach alert is necessary. As a general rule, the best placement of a monitoring device is as close to the product being monitored as possible.

To read a TrekView tag through a package:

With a TrekView Handheld Reader (HHR), TrekView tags can be downloaded and turned off/on through a shipping container that does not contain metal components. To identify the location of a tag for easy scanning, it is recommended that it be placed inside an adhesive-backed plastic pouch mounted inside the shipper. Place a TrekView bullseye label on the outside of the shipper, indicating the target scan area:



Place the TrekView tag inside the plastic shipping pouch, and adhere the plastic shipping pouch to a wall inside the shipping box.



Place the TrekView bullseye label on the outside of the box, over the same spot where the shipping pouch is located on the inside. This co-location of tag and bullseye allows for the recorder location to be identified without opening the packaging.



When scanning the shipping box with a handheld reader, place the reader over the TrekView bullseye label in order to scan for data. The HHR must be within five inches of the TrekView tag.

Accessories and Related Products

TrekView Desktop & Handheld RF Readers

The TrekView Desktop reader is available for high-volume applications when TrekView recorders are returned to a central collection site for data management.

The TrekView Handheld Reader has the ability to capture data from thousands of TrekView recorders. A touchscreen interface delivers the same information that can be gathered when connected to the TrekView Desktop Software.

	Desktop Reader Specifications	Handheld Reader Specifications
Product Size	16.5 x 24.4 x 2cm / 6.5 x 9.6 x 0.8in	8.6 x 19 x 2.8cm / 3.4 x 7.5 x 1.1in
Weight	150g	453.6g
Battery Life	N/A	Up to 10 hours (requires 4 AA batteries)
Power Supply	Input 110V-240V Output 5VDC 1.5 A (UL, CSA, TUV, CE listed)	N/A
Read Range	Up to 5.08cm / 2in	Up to 12.7cm / 5in
Operating Environment	5°C to 60°C 41°F to 150°F	-10°C to 60°C 14°F to 150°F
Data Storage	N/A	SD card
Compliance	FCC Title 47, Part 15	

TrekView Data Management System (DMS) & TrekView Desktop Software

TrekView DMS and the TrekView Desktop Software are used to communicate with TrekView tags and allow you to manage tag programming, view tag status, set alerts, and generate reports.

TrekView DMS Requirements

- Optional Readers:
 - Handheld Reader (HHR):
 - Hardware Version: 1.3.4/1.2.3
 - Firmware Version: 2.3.2/1.0.0
 - Model Number: 10
 - Parts Version: 1.3.0
 - Desktop Reader (DTR):
 - Hardware Version: 1.1.1
 - Firmware Version: 2.2.0
- For configuring tags: Windows XP, Windows Vista, Windows 7, or Windows 8
- For viewing reports: Firefox 4 and later, Safari 5 and later, Chrome 23 and later, IE 8 and later
- To communicate with the tags directly using the USB interface you will need sufficient security privileges to install and run the required USB drivers and TrekView tag drivers
- Connecting with an RF reader requires pre-installed drivers to convert from USB to serial, or the ability to download and install such drivers

With TrekView DMS, data is housed at a Tier 3 data center which provides:

- Redundant internal network distribution
- Daily data backup
- 24-hour disaster recovery
- 99.98% uptime

TrekView Desktop Software System Requirements

- Pentium II 233 MHz processor
- Windows XP (sp2 or sp3), Windows Vista, Windows 7, or Windows 8
- 64 MB RAM / 20 MB free disk space
- One available USB port
- 800 x 600 screen resolution / 256 screen colors

Ordering Information

Part Number	Description
TV43800 INT USB	TrekView - Internal USB
TV43900 EXT USB	TrekView - External USB
TV43800 SP INT USB	TrekView - Internal USB & Stainless Probe
TV43900 RP EXT USB	TrekView - External USB & Ribbon Probe
TV43900DI-EXT	TrekView Dry Ice - External USB, Ribbon Probe, Single Use
TV43700	TrekView Handheld Reader
TV43705	TrekView Desktop Reader

Technical Support

If you are unsure of how to use or interpret the TrekView, please contact ShockWatch Technical Support at (800) 527-9497 or (214) 736-4579.

Warranty

If a product fails to conform to the specifications stated in this document, the product may be returned to ShockWatch at any time prior to the product's specified expiration date or, if no expiration date is specified, within one year from the date of shipment. ShockWatch shall either refund the purchase price (without interest), or repair and/or replace the product (or, in the case of services, re-perform such services) at no additional cost. The warranty is void if the defect has resulted from accident, misuse, abuse or misapplication. Any product which is identified as defective during the warranty period and is returned to ShockWatch with a Return Material Authorization (RMA) number (which must be obtained from ShockWatch prior to any return) within thirty (30) days after discovery of the defect with a written description of the defect will be replaced by ShockWatch.



Limitation of Liability

Seller makes no warranty, expressed or implied, except that the Products sold hereunder shall conform to Seller's written specifications for such Products as in effect and provided to Buyer by Seller at the time of sale of such Products to Buyer ("Seller's Specifications").

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Appendix A – How to Use TrekView Recorders

The compact design of TrekView Tags allows you to monitor temperature at the item, case, pallet or truckload level.

While many other temperature recorders limit you to one download before stopping the recording process, TrekView allows you to scan and view tag data repeatedly, allowing you to take measurements at any point in the cold chain.

Turning the TrekView ON/OFF

In order to use the ON/OFF button on the front of the tag, the tag must be placed in standby mode and configured using the TrekView Software or TrekView DMS. (To configure your tag, please refer to the appropriate manual.) Press the ON/OFF button between your forefinger and thumb. Once a tag is successfully turned on, the programmed soaking time will begin. After the soaking period has expired, the tag will begin recording time and temperature. To stop manually, press and hold the ON/OFF button for one full second.

Checking the Status of a Tag

To check the current excursion status and tag mode, press the Status button. If the tag's Active LED is solid green upon pressing the Status button, the tag is recording. If the Active LED blinks, the tag is off, soaking (delayed startup), or in standby mode. A solid red LO or HI LED is representative of a low or high temperature excursion, respectively.

Retrieving TrekView Tag Data

TrekView Tag temperature data can be downloaded by using any of the following options:

1. **TrekView Desktop Reader (DTR):** The DTR connects to a PC for instant access to graphs and reports via TrekView DMS or the TrekView Desktop Software.
2. **TrekView Handheld Reader (HHR):** The HHR allows you to stop/start and scan a tag (without opening boxes), view temperature history, and download tag data to a PC. A touchscreen interface delivers the same information that can be gathered when connected to TrekView DMS or the TrekView Desktop Software. The HHR houses an SD card with 4GB of memory, enabling it to hold thousands of readings before downloading.
3. **Directly connecting a TrekView Tag to a PC via the USB port:** TrekView Tags are available with an external/exposed USB cable or an internal USB port. For tags with an external USB cable, simply plug the cable into your PC. For tags with an internal USB port, tear off the sealed end of the zipper pouch which contains the TrekView Tag, then open the zipper seal and pull back the paper tab to expose the micro USB port. You will need a micro USB to USB cable to plug the tag into your PC. Once the tag is connected to the PC, data can be downloaded and viewed via TrekView DMS or the TrekView Desktop Software.

For detailed instructions on how to use TrekView tags, TrekView DMS or the TrekView Desktop Software, refer to the appropriate user manual provided by ShockWatch or your local distributor.

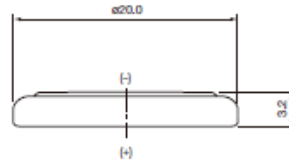
Appendix B – TrekView Battery Specifications

Data Sheet

Coin Type Lithium Manganese Dioxide Battery
CR2032

maxell

Model	CR2032
System	Manganese Dioxide–Li/Organic Electrolyte
Nominal Voltage (V)	3
Nominal Capacity (mAh)*	220
Nominal Discharge Current (mA)	0.2
Operating Temperature Range (deg. C)**	-20 to +85
Weight (g)***	3.0
Dimensions (mm)***	
Diameter	20.0
Height	3.2
UL Recognition	MH12568

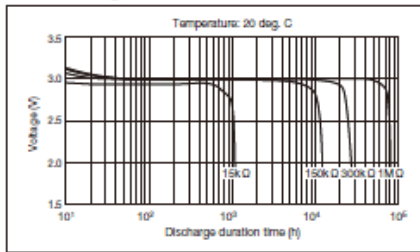


Available Terminals and Wire Connectors

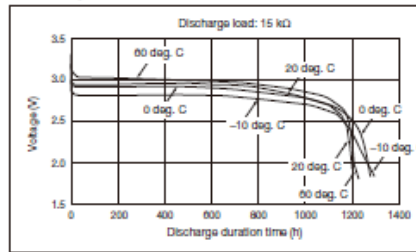
Check http://biz.maxell.com/products/industrial/battery/cr/pdf/cr2032tw_11e.pdf for diagrams of batteries with terminals.

Characteristics

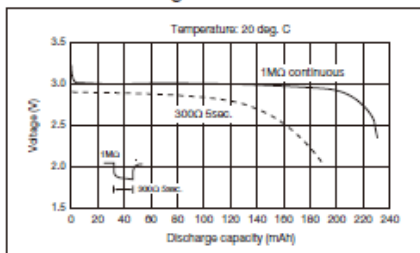
● Discharge Characteristics



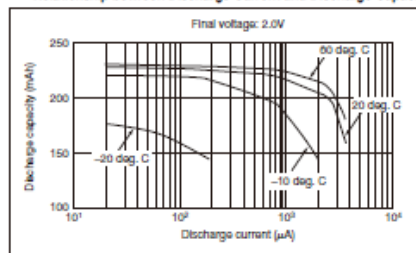
● Temperature Characteristics



● Pulse Discharge Characteristics



● Relationship between Discharge Current and Discharge Capacity



* Nominal capacity indicates duration until the voltage drops down to 2.0V when discharged at a nominal discharge current at 20 deg. C.
 ** When using these batteries at temperatures outside the range of 0 to +40 deg. C, please consult Maxell in advance for conditions of use.
 *** Dimensions and weight are for the battery itself, but may vary depending on terminal specifications and other factors.

Hitachi Maxell Energy, Ltd.

• Data and dimensions are not guaranteed. For further details, please contact us at your nearest Maxell office.
 • Contents on this website are subject to change without notice.

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