



Temperature Loggers

TL20 and TL20V*

Monitor temperature sensitive products to verify product safety and shelf life

- *Easy to use software*
- *Cost-effective reusability*
- *One unit for short or long term monitoring*



When you or your customers want to know temperature conditions during shipment, all the data you need now comes in a small, feature-loaded package:

- Cost effective alternative to single use monitors
- Reliable and accurate recording of up to 12,000 data points of time and temperature
- High performance battery for up to 12 months use with short circuit protection and low battery indicator
- LED flashing options to visually monitor the temperature exceeding programmed limits
- EN 12830 compliant for the transport and storage of chilled or frozen foods

3M™ Temperature Logger System Components

- 3M Temperature Logger TL Series PC Software
- 3M Temperature Logger TL Series USB Connection Cable
- Food grade plastic bag to be used when the logger is placed in contact with food
- Website: www.3M.com/temperaturelogger

* Each TL20V is certified for temperature accuracy at -10°C, 10°C and 50°C.



Monitor package temperature for confidence in freshness and shelf life during shipment and storage.

Flexibility and ease of use for your temperature monitoring needs

Primary Applications

3M™ Temperature Logger TL20 is recommended for recording temperatures during transportation and/or storage of these temperature-sensitive products:

- Fresh produce, fruit, and vegetables
- Seafood
- Meat and poultry
- Milk-based products
- Chemical products

3M™ Temperature Logger TL20V includes a certificate of accuracy for factory calibration and is recommended for recording temperatures during transportation and/or storage of these temperature-sensitive products:

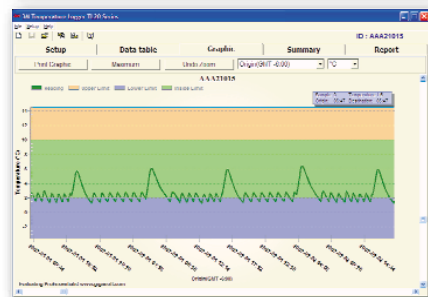
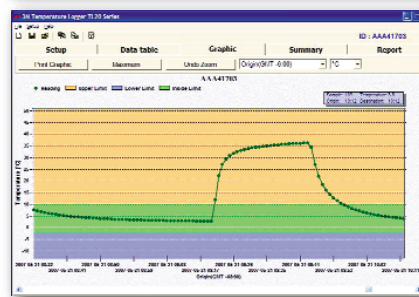
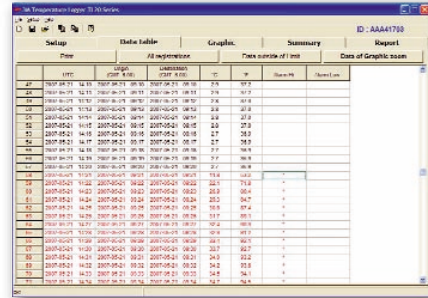
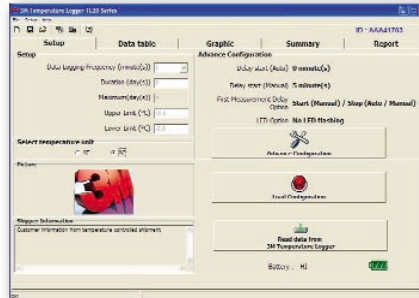
- Pharmaceuticals
- Medical and biological products, and clinical samples
- Chemical products requiring regulatory documentation
- Other perishable products requiring validation documentation

Confidence in the data

- Three-point temperature verification (-10°C, 10°C, and 50°C) with TL20V ensures accuracy
 - Verification in ISO 17025 laboratory accredited by A2LA, NIST Traceable
- Software is CFR 21 Pt 11 compliant to ensure data security
- Easy one-click reporting in read-only Excel format

Typical Performance Properties

Temperature Range and Accuracy	-20°C (-4°F) to 30°C (86°F) [+/- 0.5°C (+/-0.9°F)] 30°C (86°F) to 60°C (140°F) [+/- 1.0°C (+/-1.8°F)]
Temperature Resolution	0.1°C (0.3°F)
Memory Data Points	12,000+
Data Logging Frequency	1 to 120 minutes
Auto Start-Up Delay	0 to 168 hours (0 to 7 days)
Manual Start-Up Delay	0 to 240 minutes (0 to 4 hours)
Range of Monitoring Time	1 to 360 days
Water Splash Resistance	NEMA 3R
Size	70 mm x 44 mm x 11 mm (2.8 in x 1.7 in x 0.4 in)
Weight	26 grams (0.91 oz.)



PC software is user-friendly for customization, functionality, and reporting. View time and temperature data as a graph or in a spreadsheet. Temperature monitor connects to software with a USB cable.

Free software download at
www.3M.com/temperaturelogger

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