

Part # CM-000134 M-Tag Data Loggers

Used as spot verification tools and for mapping and thermal studies, Mesa's M-Tag data loggers are the ideal solution for several industries and situations. With a variety of options and configurations, these units pack a large amount of capabilities into a small, affordable form factor.

The M-Tag P/N CM-000134 Temperature Recorder uses an External Probe to measure and store up to 7770 temperature readings over a measurement range of -40 °C to +99 °C (-40 °F to +210 °F).

Key Features:

- Interchangeable External Probe with high quality gold plated connector
- Display shows current time & temperature plus alarm status
- 30 day statistics summary reviewable on device display
- User replaceable battery

Statistical temperature and alarm duration readings for up to 30 days can be reviewed on the display.

The display of current temperature and previous alarms is an important feature in "static" Applications such as cool rooms and refrigerators.

The display elements are arranged so they to show 'at a glance' if temperature violations have occurred between now and 29 days ago. The display also shows the current temperature reading, the current time, battery status and if it is currently recording.

- A real time clock provides date/time stamps for each temperature reading.
- 'Pause Mark' feature to prevent falsified statistics data from inspection.
- Power saving feature - automatic display turn off after 30 seconds to extend battery life.
- Complies with industry standards.

Using the M-Tag Interface Cradle and available companion software, M-Tags are easily set-up for recording including delayed start, sampling interval, number of readings and configuration of conditions to activate the 'ALERT' indicator.

M-Tag software also provides facilities for charting, zooming, listing data statistics and allows exporting the data to other applications such as MS Excel once the data has been downloaded.



M-Tag Data Loggers Specification Sheet

Specifications:

External Sensor Measurement Range	-40 °C ~ +99 °C (-40 °F ~ +210 °F)
Recorder Operating Temperature Range	-30 °C ~ +60 °C (-22 °F ~ +140 °F)
Resolution	<ul style="list-style-type: none"> 0.1 °C (0.2 °F) for measurements -40 °C ~ +50 °C (-40 °F ~ +122 °F) 0.2 °C (0.4 °F) for measurements +50 °C ~ +70 °C (+122 °F ~ +158 °F) 0.3 °C (0.5 °F) for measurements +70 °C ~ +80 °C (+158 °F ~ +176 °F) 0.4 °C-0.6 °C (0.7 °F~1 °F) for measurements +80 °C~ +99 °C (+176 °F ~ +210 °F)
Accuracy	<ul style="list-style-type: none"> Better than ±0.5 °C (±0.9 °F) for -20 °C~+40 °C (-4 °F~+104 °F) - typically ±0.3 °C (0.6 °F) Better than ±0.8 °C (±1.5 °F) for -40 °C~-20 °C (-40 °F~ -4 °F) - typically ±0.5 °C (0.9 °F) Better than ±0.8 °C (±1.5 °F) for +40 °C~+70 °C (+104 °F~+158 °F) - typically ±0.7 °C (0.9 °F) Better than ±1.2 °C (±1.5 °F) for +70 °C~+99 °C (+158 °F~+210 °F) - typically ±1 °C (0.9 °F)
Sensor Reaction Time	Typically less than 2 minutes in moving air (1 m/s) types.
Capacity	<ul style="list-style-type: none"> Data logging memory: 7770 logs (53 days @ 10min logging, 80 days @ 15min logging) Day summary statistics memory (for display on LCD): up for 30 days of Max/Min and duration values
Sampling Frequency	Adjustable, 30 seconds to several hours
Logging Start Options	Push button start or specific date & time. Optional start delay of up to 18 hours
Recording Indication	State indicator "RECORDING"
Download Time	Typically with full memory (7770 readings) in less than 5 seconds depending on computer or readout device used
Environmental	IP61
Power Source	3V Lithium-Manganese Dioxide extended temperature chemistry
Battery Life	Typically 1 year of operation NOTE: Typical battery life assumes 6 minute logging, day statistics are reviewed on the display no more than once daily for no longer than 30 seconds each time. Download data monthly.
Size	93 mm (H) x 54.5 mm (W) x 8.6 mm (T)
Weight	41 grams
Case Material	Polycarbonate
External Temperature Probes	Standard M-Tag temperature probes (Standard lengths 1.5m (4'11") or 3m (9'10"))
Other Features	<ul style="list-style-type: none"> Optional clearing of alert indication by push button (places inspection mark at same time) Download inspection mark recorded in M-Tag memory every time the M-Tag is downloaded 'Prestart' fail-safe logging (records temperature data even if not started) Low Battery indication in software Comprehensive Alarm trigger configuration