DATASHEET

NanoTemp125-1

MadgeTech

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MADGETECH
WE BUILD DATA LOGGERS

NanoTemp125

High Temperature Data Logger

The NanoTemp125 is a sleek, high precision temperature data logger engineered for the most demanding environments. Perfectly sized for tight spaces, this durable stainless steel logger is fully submersible and thrives in extreme temperatures ranging from -20 °C to +125 °C. Precision is paramount with the NanoTemp125, offering an accuracy of ±0.1 °C to ensure your data is always reliable.

Despite its compact size, the NanoTemp125 does not skimp on capacity, storing over 32,000 readings. It logs date and time-stamped readings and is equipped with non-volatile solid state memory that safeguards your data, even when the battery runs low.

The NanoTemp125 isn't just tough—it's purpose-built for precision in critical applications like autoclave validations. Its compact size allows it to fit effortlessly into tight spaces, ensuring accurate temperature monitoring throughout the sterilization process. Whether you're validating autoclaves in pharmaceutical production, laboratory settings, or medical device manufacturing, the NanoTemp125 delivers reliable, high-precision data you can trust. Its durable, submersible design makes it ideal for the intense environments autoclave processes demand, ensuring compliance and peace of mind.

The NanoTemp125 is also fully compatible with MadgeTech 4 Software, enhancing your data logging experience with powerful analysis tools right at your fingertips.

FEATURES

- Miniature Size
- ±0.1 °C (± 0.18 °F) Accuracy
- Operates from -20 °C to +125°C
- Submersible (IP68)
- User Replaceable Battery
- Rugged Stainless Steel
- Programmable Start & Stop Time
- Probe Lengths up to 5.25 inches

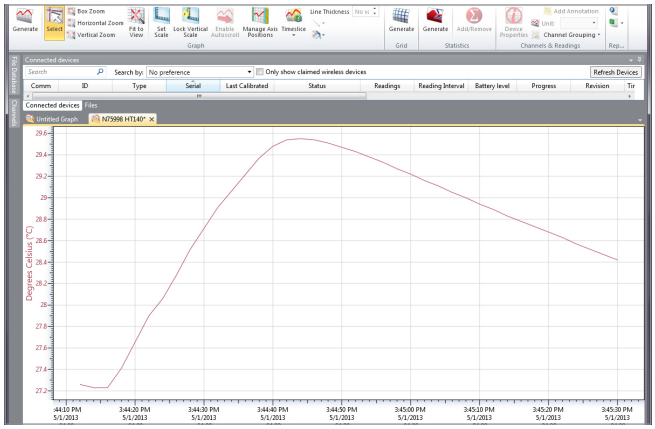
BENEFITS

- Designed for tight spaces
- Simple Set up and Use
- Minimal Maintenance

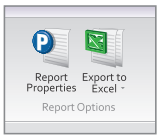
APPLICATIONS

- Autoclave Verification
- Implement HACCP Programs
- Food Preparation and Processing
- Environmental Studies
- Well Monitoring
- Dishwasher Testing
- Pasteurization

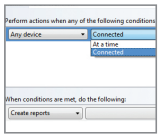
MadgeTech 4 Software Features



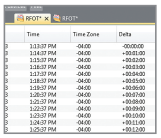
Graph View



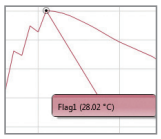
Export to Excel



Automation



Tabular Data View



Cooling Flags

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Summary view

Specifications

Specifications are subject to change without notice. Specific warranty remedy limitations apply.
Call **(603) 456-2011** or go to **madgetech.com** for details.

TEMPERATURE

Temperature Sensor	Internal RTD
Probe Measurement Range	-200 °C to +260 °C (-328 °F to +500 °F) BODY OF LOGGER CANNOT EXCEED 125 °C
Temperature Resolution	0.01 °C (0.02 °F)
Calibrated Accuracy	±0.1 °C/±0.18 °F (20 °C to +125 °C/68 °F to +257 °F) ±0.3 °C/±0.54 °F (-20 °C to +19.99 °C/-4 °F to +67.98 °F)

GENERAL

Start Modes	Software programmable immediate start Delay start up to 18 months in advance
Stop Modes	Manual or Timed (specific date and time)
Real Time Recording	May be used with PC to monitor and record data in real time
Password Protection	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
Memory	32,512 readings
Trigger Settings	High and Low limits may be set. Once data meets or exceed sets limits, the device will record to memory. Bi-level start and stop triggers can also be programmed. Users can specify the number of readings to take after the device triggers.
Reading in Trigger Settings Mode	6,502 readings
Wrap Around	Yes
Reading Rate	1 reading every second up to 1 reading every 24 hours
Calibration	Digital calibration through software
Calibration Date	Automatically recorded within device

Battery Type	Two 3 V high-temperature lithium coin cell battery included; user replaceable
Battery Life	1 years typical (1 minute reading rate at 25 °C)
Data Format	Date and time stamped °C, K, °F or °R
Time Accuracy	±1 minute/month at 20 °C to 30 °C (68 °F to 86 °F) (Stand alone mode)
Computer Interface	IFC400 OR IFC406 USB docking station and adapter required; 125,000 baud
Operating System Compatibility	Windows XP SP3 or later
Software Compatibility	Standard Software version 4.2.25.16 or later Secure Software version 4.2.24.16 or later
Operating Environment	-20 °C to +125 °C (-4 °F to +257 °F) 0 %RH to 100 %RH, 0.002 PSIA to 100 PSIA
IP Rating	IP68
Dimensions (Body)	0.9 in x 0.7 in dia. 22.9 mm x 17.8 mm dia.
Dimensions (Probe)	NanoTemp125-1: 1.0 in x 0.125 in dia. (0.188 in trans. dia.) 25.4 mm x 3.2 mm dia. (4.8 mm trans. dia.) NanoTemp125-2: 2.0 in x 0.125 in dia. 50.8 mm x 3.2 mm dia. (4.8 mm trans. dia.) NanoTemp125-5: 5.0 in. x 0.125 in dia. 133.35 mm x 3.2 mm dia. (4.8 mm trans. dia.)
Weight	NanoTemp125-1: 0.63 oz (18 g) NanoTemp125-2: 0.67 oz (19 g) NanoTemp125-5.25: 0.71 (20 g)
Material	316 Stainless Steel, PEEK
Approvals	CE

BATTERY WARNING: BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, RECHARGE, DEFORM, THROW INTO FIRE OR DISASSEMBLE. RISK OF EXPLOSION IF HEATED ABOVE 125 °C (257 °F)

Ordering Information

NANOTEMP125-1	PN 902459-00	Miniature High Temperature Data Logger with 1 in Probe
NANOTEMP125-2	PN 902460-00	Miniature High Temperature Data Logger with 2 in Probe
NANOTEMP125-5.25	PN 902461-00	Miniature High Temperature Data Logger with 5.25 in Probe
IFC400	PN 900319-00	Docking Station with USB Cable
IFC406	PN 900325-00	6 Port, Multiplexer Docking Station with USB Cable
NANOTEMP125 COMMUNICATION KIT	PN 902677-00	Includes IFC Adapter and Wrench
BAT-BR1225A-00	PN 902678-00	Replacement Battery for the NanoTemp125 (2-Pack)

For Quantity Discounts call (603) 456-2011 or email sales@madgetech.com