

## DATASHEET

# NanoTemp125-CF-2.1

MadgeTech

Distributed by AKRIBIS





# NanoTemp125-CF

## Miniature Temperature Data Logger

The NanoTemp125-CF securely attaches to jars, cans, or other containers using the MadgeTech Canning Fitting or ThermoLock Thermowells, allowing the probe to monitor heat penetration and temperature distribution during pasteurization and retort processes. With a compact design and a maximum temperature of 125 °C (257 °F), the NanoTemp125-CF is perfect for small-scale canning applications or processes where space is limited but precision is critical.

### For Use With:



# Specifications

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

| TEMPERATURE             |                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------|
| Temperature Sensor      | 100 Ω Platinum RTD                                                                                                |
| Probe Measurement Range | -200 °C to +260 °C (-328 °F to +500 °F)<br><b>BODY OF LOGGER CANNOT EXCEED 125 °C</b>                             |
| 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)<br>±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<br>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 year typical<br>(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<br>(68 °F to 86 °F) (Stand alone mode)                                                                                                                                                                      |
| Computer Interface               | IFC400 OR IFC406 USB docking station and adapter required; 125,000 baud                                                                                                                                                                       |

**Battery Warning:** fire, explosion, and severe burn hazard. Do not short circuit, charge, force over discharge, crush, penetrate, or incinerate. Battery may leak or explode if heated above 150 °C (302 °F).

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating System Compatibility | Windows XP SP3 or later                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Software Compatibility         | Standard Software version 4.2.25.16 or later<br>Secure Software version 4.2.24.16 or later                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating Environment          | -20 °C to +125 °C (-4 °F to +257 °F)<br>0 %RH to 100 %RH, 0.002 PSIA to 100 PSIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| IP Rating                      | IP68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Dimensions (Body)              | 0.9 in x 0.7 in dia.<br>22.9 mm x 17.8 mm dia.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Dimensions (Probe)             | NanoTemp125-CF-1.1:<br>1.1 in x 0.095 in (27.94 mm x 2.4mm)<br>NanoTemp125-CF-1.2:<br>1.2 in x 0.095 in (30.48 mm x 2.4mm)<br>NanoTemp125-CF-1.3:<br>1.3 in x 0.095 in (33.02 mm x 2.4mm)<br>NanoTemp125-CF-1.4:<br>1.4 in x 0.095 in (35.56 mm x 2.4mm)<br>NanoTemp125-CF-1.5:<br>1.5 in x 0.095 in (38.1 mm x 2.4mm)<br>NanoTemp125-CF-1.6:<br>1.6 in x 0.095 in (40.64 mm x 2.4mm)<br>NanoTemp125-CF-1.8:<br>1.8 in x 0.095 in (45.72 mm x 2.4mm)<br>NanoTemp125-CF-2.1:<br>2.1 in x 0.095 in (53.34 mm x 2.4mm)<br>NanoTemp125-CF-2.2:<br>2.2 in x 0.095 in (55.88 mm x 2.4mm)<br>NanoTemp125-CF-3.1:<br>3.1 in x 0.095 in (78.74 mm x 2.4mm)<br>NanoTemp125-CF-3.9:<br>3.9 in x 0.095 in (99.06 mm x 2.4mm)<br>NanoTemp125-CF-5.4:<br>5.4 in x 0.095 in (137.16 mm x 2.4mm) |
| Weight                         | 0.63 oz (18 g)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Material                       | 316 Stainless Steel, PEEK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Approvals                      | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



## Ordering Information

|                                  |           |                                                    |
|----------------------------------|-----------|----------------------------------------------------|
| NanoTemp125-CF-1.1               | 902462-00 | NanoTemp125-CF with 1.1" probe                     |
| NanoTemp125-CF-1.8               | 902668-00 | NanoTemp125-CF with 1.8" probe                     |
| NanoTemp125-CF-2.1               | 902669-00 | NanoTemp125-CF with 2.1" probe                     |
| NanoTemp125-CF-3.1               | 902671-00 | NanoTemp125-CF with 3.1" probe                     |
| NanoTemp125-CF-3.9               | 902672-00 | NanoTemp125-CF with 3.9" probe                     |
| NanoTemp125-CF-5.4               | 902673-00 | NanoTemp125-CF with 5.4" probe                     |
| ThermaLock-1.1                   | 902122-00 | 1.1" Thermowell for Canning Data Loggers           |
| ThermaLock-1.2                   | 902102-00 | 1.2" Thermowell for Canning Data Loggers           |
| ThermaLock-1.3                   | 902123-00 | 1.3" Thermowell for Canning Data Loggers           |
| ThermaLock-1.4                   | 902103-00 | 1.4" Thermowell for Canning Data Loggers           |
| ThermaLock-1.5                   | 902124-00 | 1.5" Thermowell for Canning Data Loggers           |
| ThermaLock-1.6                   | 902104-00 | 1.6" Thermowell for Canning Data Loggers           |
| ThermaLock-1.8                   | 902125-00 | 1.8" Thermowell for Canning Data Loggers           |
| ThermaLock-2.1                   | 902435-00 | 2.1" Thermowell for Canning Data Loggers           |
| ThermaLock-2.2                   | 902127-00 | 2.2" Thermowell for Canning Data Loggers           |
| ThermaLock-3.1                   | 902128-00 | 3.1" Thermowell for Canning Data Loggers           |
| ThermaLock-3.9                   | 902119-00 | 3.9" Thermowell for Canning Data Loggers           |
| ThermaLock-5.4                   | 902446-00 | 5.4" Thermowell for Canning Data Loggers           |
| IFC400                           | 900319-00 | Docking Station with USB Cable                     |
| IFC406                           | 900325-00 | 6 Port, Multiplexer Docking Station with USB Cable |
| NanoTemp125-CF Communication Kit | 902677-00 | Includes IFC Adapter and Wrench                    |
| BAT-BR1225A-00                   | 902678-00 | Replacement Battery for the NanoTemp125 (2-Pack)   |

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