

# DATA TRACE® RF

## Monitor Process Temperatures in Real Time

To control product quality, you have to control the process... and the best way to control the process, is in real time. For many manufacturing, storing, shipping and other processes that requires precise real time temperature monitoring, DataTrace® RF MPRF Temperature Data Loggers deliver. From chilling, freezing and room temperature to pasteurization, Ethylene Oxide sterilization and depyrogenation, MPRF Temperature Loggers provide accurate data over a wide temperature range with remarkable ease.

Adaptable to almost any situation, the MPRF temperature logger's small size increases versatility and precision by allowing you to position them very near or inside your target products.

Each MPRF logger can collect 8,000 data points for exceptional detail for longer processes. Collected data is visible from one of several real-time displays or logged into DataTrace RF's highly secure, FDA 21 CFR Part 11 compliant DTRF software and reported in any format you require. Password protected access, electronic signatures and automatic documentation for audit trails streamline your work. You can even synchronize multiple MPRF Loggers (in any combination of logger types) to the same clock... something disparate systems can't do.

### Ensure precise monitoring across broad temperature changes

With the Temperature Data Logger, DataTrace RF makes it easy to monitor processes across a spectrum of temperatures in industries and situations, such as:

- Pharmaceuticals
- Food and beverages
- Medical
- Sterilizer validation
- Process equipment and sterilization
- Product handling and storage
- Textile manufacturing
- Thermal processing for electronic, chemical, aerospace and other industries



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# DATA TRACE<sup>®</sup> RF

## Product Specifications

### MPRF Temperature Logger

Operating temperatures	-80°C to +400°C (-112°F to +752°F)*
Temperature accuracy	-80°C to -40°C (-112°F to -40°F): ±0.3°C (±0.5°F) -40°C to +140°C (-40°F to +284°F): ±0.1°C (±0.2°F) +140°C to +400°C (+289°F to +752°F): ±0.5°C (±0.9°F)
Operating pressure	Up to 10 BAR
Wireless Range	100 feet (30 meters) Line of Sight
Radio Frequency	2.4 GHz range ISM Band
<b>Physical</b>	
Size	Width: 0.89 in. (22mm) Length: 3.6 in. (91mm)**
Weight	3.1 oz. (89 grams)**
Material	316 stainless steel and ULTEM

\* Operation below -40°C and above 140°C requires a special calibration. Operation above 140°C requires thermal protection. RF communication may be limited below -40°C and above 125°C.

\*\* Body only.

### Mechanical

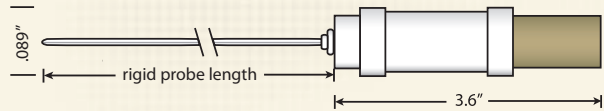
Calibration	Factory calibrated (NIST traceable) Field calibration
Battery type	AA Lithium (field-replaceable)
Battery life	6 months to 1 year (depending on usage)
Clock accuracy	10 seconds per 24 hours (25°C)
Certifications	<ul style="list-style-type: none"> <li>ATEX (for intrinsic safety)</li> <li>FCC Class B digital device (Part 15 compliant)</li> </ul>

### Monitoring Parameters

Memory	8,000 time/temperature observations
Sample rates	<ul style="list-style-type: none"> <li>5 sec. to 10 min. interval with radio</li> <li>1 sec. to 10 min. interval without radio</li> </ul>

### Minimum System Requirements

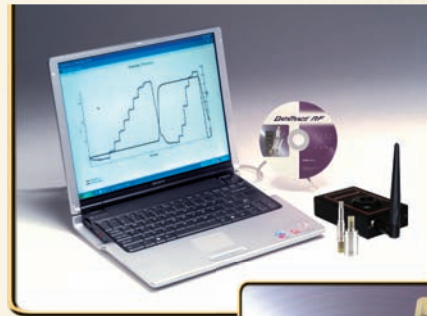
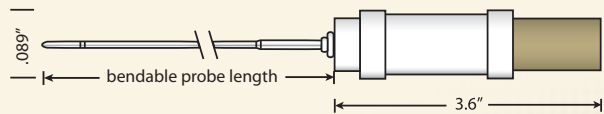
- Pentium 4CPU – 2.0 GHz
- Windows XP operating system
- 512 MB RAM
- 100 MB of free hard disk space
- 1 free USB port
- 1 CD ROM drive



Probes available in the following standard lengths:

**Rigid:** 2" (50 mm), 3" (76 mm), 4" (101 mm), 5" (127 mm), 6" (152 mm)

**Bendable:** 9.8" (250 mm), 13.8" (350 mm), 25.6" (650 mm)



### Complete monitoring system

All MPRF Loggers require an Interface/Host System, which includes robust DTRF software, an interface/host module and cable. The DTRF software operates with any combination and number (up to 250) of DataTrace Temperature, Humidity and Pressure Loggers. So instead of dealing with the expense and confusion of disparate monitoring systems, users can validate, monitor, log and analyze data for multiple process parameters using a single integrated, powerful and complete solution. This makes DataTrace RF unique in the industry.

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