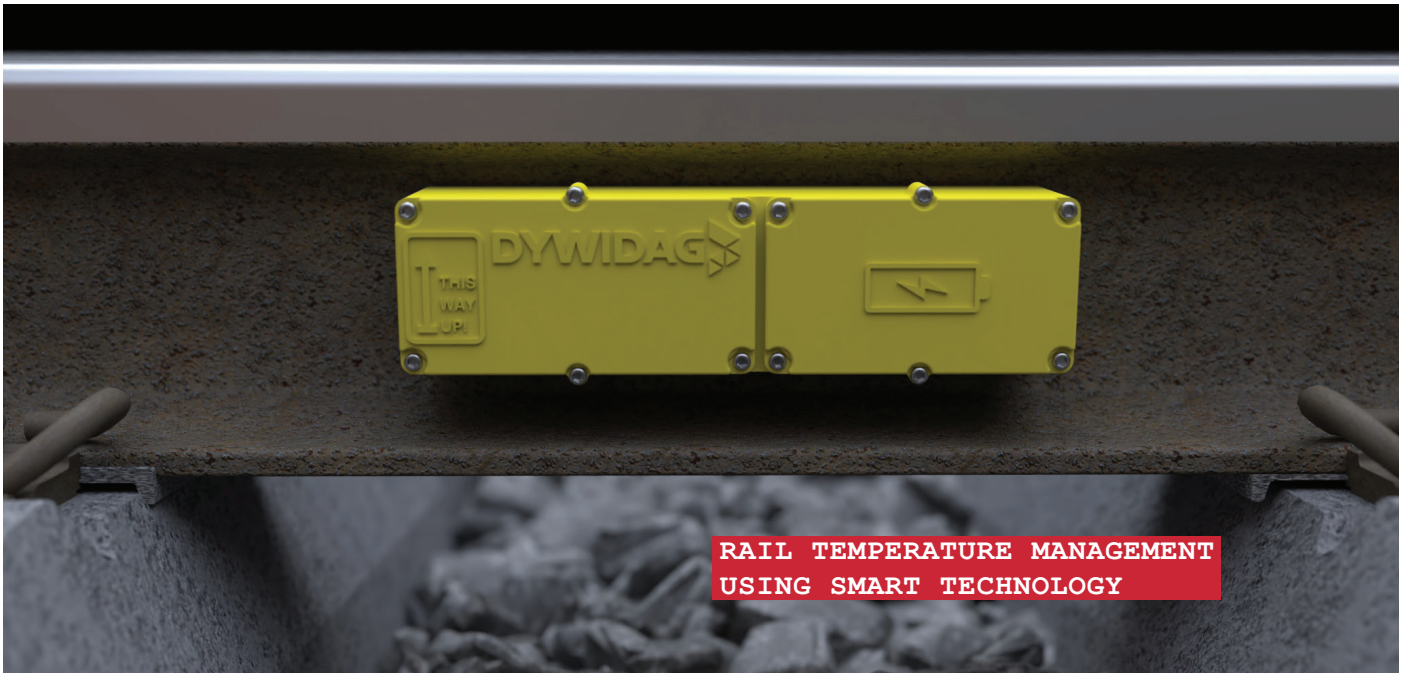


Transforming Rail Safety with DYWIDAG Smart Temp



DYWIDAG Smart Temp Monitor

DYWIDAG's new Smart Temp monitor marks an advancement in railway safety, responding to Network Rail's mandate to prioritise rail temperature monitoring as a critical safety measure. This shift highlights the role of precise, real-time data in averting accidents and safeguarding passenger travel, steering us toward enhanced reliability and security in rail operations.

The DYWIDAG Smart Temp monitor provides Permanent Way Managers with real-time rail temperature data every 15 minutes. This reduces unnecessary speed restrictions, and minimises time spent working on or near the line, keeping boots off ballast.

Equipped with two high-strength magnets, the Smart Temp's design guarantees secure attachment to the rail, eliminating the risk of detachment due to vibration. Its portable nature allows for quick installation, and the device's robust, yellow casing ensures visibility and durability against accidental damage.

DYWIDAG Smart Temp activates upon rail contact, instantly transmitting GPS coordinates to the user and Network Rail's RADAR 2 platform. It offers configurable, real-time temperature updates and signal strength indicators, enhancing operational efficiency and safety. Operational from 08:00 to 20:00 daily, Smart Temp's user-friendly design includes a serviceable 6-month battery life, with a quick 5-hour recharge time, eliminating the need for return to DYWIDAG for maintenance.



Data from the device is accessible via DYWIDAG's secure Infrastructure Intelligence data platform or the Network Rail RADAR 2 platform, ensuring vital information is always at the fingertips of those responsible for maintaining rail safety and efficiency.

Key Features

- Network Rail Product Approval number PA05/07912
- Fully compliant with the Functional & Technical Requirements for Remote Rail Temperature Monitoring Devices (RTM) - Draft 2, 26.10.23
- Attached and removed in seconds.
- Energised on contact with rail - stops sending data if detached.
- GPS locator advises position daily or in the event of being repositioned.
- Data sent every 15 minutes between 08:00 and 20:00 daily.
- Fully Integrated with Network Rail's RADAR 2 platform and II.
- 6 months battery life.
- Battery strength indicator.
- Signal strength indicator.
- User configurable temperature thresholds.
- Immediately sends data when thresholds are crossed.

Key Advantages

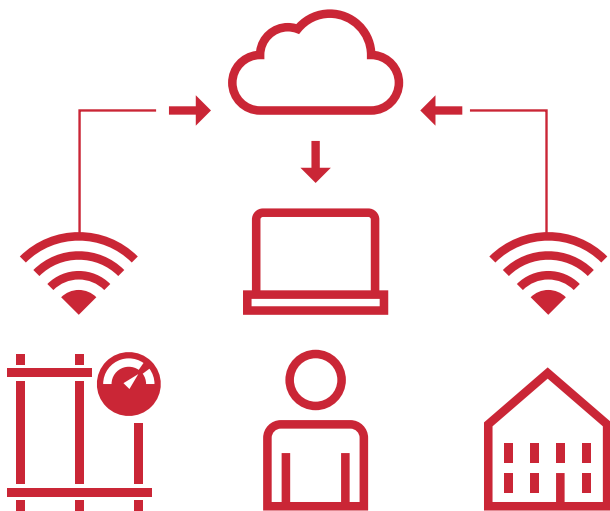
- Significantly reduces the amount of time on or near the line. Keeps boots off ballast.
- Confidence that the unit is measuring actual rail temperature.
- Measures track temperature at specified intervals.
- Remotely controlled with user defined settings.
- Battery life optimised by only sending data during specified operating window.



DURABLE, YELLOW CASING FOR ENHANCED VISIBILITY AND PROTECTION

 **Infrastructure Intelligence**

Data can be integrated into 3rd party solutions. Infrastructure Intelligence (II) is fully compatible with Network Rail's RADAR 2. Infrastructure Intelligence is a secure software application developed by DYWIDAG. It complements all of DYWIDAG's services and products providing a powerful data management and presentation solution.



Key Benefits

- Built on Microsoft Azure's cloud platform.
- Access data remotely via a browser on mobile or computer.
- Multi-layered user profiles with customisable permissions.
- Benefit from a powerful and intuitive project dashboard with maps and images.
- Visualise data through interactive charts.
- Receive automated notifications via email or SMS.
- Track and measure temperature, weather, dynamic, environmental and movement events.
- Anticipate and mitigate risks effectively.



DYWIDAG Technical Specification

SAMPLE RATE	From 08:00 to 20:00 daily, once every 15 minutes in standard mode. Fully configurable in advanced mode. Data is accessible from DYWIDAG'S Infrastructure Intelligence platform and also forwarded to RADAR 2
SENSOR	FIR sensors
OPERATING AMBIENT TEMP RANGE	-27°C to +60°C (70°C on rail)
RESOLUTION	0.02°C
ACCURACY	+/-0.2°C
COMMUNICATION DATA	MQTT over NB-IoT/LTE-M/GPRS
POWER SUPPLY	Li-Ion 7.2V DC / 7Ah / 50.8Wh
CHARGING	Up to 5 hours for a full charge
DIMENSIONS	210mm x 60mm x 55mm (LxWxH)
TOTAL WEIGHT	480 g
MATERIALS	Polyamide, Stainless Steel
GPS LOCATION	Accurate to ±2.5m in optimal conditions
DATA STORAGE	Data storage in Infrastructure Intelligence Cloud
BATTERY CAPACITY	180 days
BATTERY LIFE SPAN	Unit can be recharged in excess of 500 times
CLAMP	Magnetic
WATER PROOFING	IP67
CE	CE rated
SIGNAL STRENGTH INDICATOR	Supplied with telemetry to both II & RADAR 2
AUTO SWITCH ON/OFF	Energised only when attached to the track
ON TRACK/OFF TRACK INDICATOR	Yes
CERTIFICATION	Network Rail Product Approval number PA05/07912

¹ There are two pricing options at purchase; Standard and Advanced mode.
A Standard device can be upgraded to an Advanced device after purchase.