

## Automated TMV Monitoring at Sea Life London (Case Study)

### Automated Monitoring, Daily Reporting and Improved Visibility

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#### Overview

Sea Life London required a practical way to improve visibility of Thermostatic Mixing Valve (TMV) temperatures between routine inspections.

Traditional TMV monitoring methods rely on periodic manual temperature measurements, providing only a snapshot of system performance at the time of inspection. This can leave long periods where temperature variations or equipment issues may go unnoticed.

TMV Monitors Ltd implemented a cloud-connected monitoring solution that provides continuous temperature monitoring, automated reporting and real-time device status visibility.

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#### The Challenge

Managing multiple TMVs across a busy public attraction presents several challenges:

- Manual temperature measurements are time-consuming.
- Temperature readings are only available at the time of inspection.
- Equipment faults may remain undetected between scheduled visits.
- Historical records can be difficult to review and analyse.
- Facilities teams require confidence that TMVs are operating within expected parameters.

Sea Life London required a solution that could provide greater visibility while reducing reliance on manual data collection.

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#### The Solution

TMV Monitors installed a network of intelligent monitoring devices connected to cloud-based reporting software.

Each monitoring point continuously records:

- Hot water inlet temperature
- Cold water inlet temperature
- Mixed outlet temperature

The system automatically uploads data to a secure cloud platform and generates daily reports for authorised users.

Key features include:

- ✓ Automated daily temperature reports
  - ✓ Remote Monitoring Dashboard
  - ✓ Historical temperature records
  - ✓ Online/offline device monitoring
  - ✓ Alarm and notification capability
  - ✓ Multi-site scalability
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## Live Installation

Current deployment at Sea Life London: (Operating continuously since April 2026)

- Multiple TMV monitoring points installed
- Continuous monitoring of hot, cold and mixed outlet temperatures
- Automated daily reporting
- Remote dashboard access
- Device health monitoring



## Example Daily Temperature Report

The system automatically generates a daily summary report showing minimum and maximum temperatures recorded during the reporting period.

Benefits include:

- Immediate visibility of temperature performance
- Rapid identification of abnormal readings
- Centralised reporting for facilities teams
- Reduced manual record keeping

**Daily Temperature Report**  
Date: Saturday, 06 Jun 2026  
Window: 08:00 → 20:00

Device	Status	Hot Min	Hot Max	Cold Min	Cold Max	Mixer Min	Mixer Max
basement-1-male	online	24.1	53.5	19.5	29.8	24.0	40.1
female-1-back-sink	online	23.8	55.2	19.5	27.6	23.8	42.3
female-1-front-sink	online	23.9	55.9	19.1	28.2	24.0	41.2
rockpool-left-sink	offline	22.8	59.8	20.2	25.3	22.9	46.1
rockpool-right-sink	online	26.9	67.3	16.9	26.4	25.3	50.4

## Cloud Dashboard

Users can access temperature data remotely through the TMV Monitors dashboard.

The dashboard provides:

- Live device status
- Historical temperature trends
- Reporting tools
- Device management functions

Temperature Data

PURGE OFFLINE DEVICES

Device	Hot (°C)	Cold (°C)	Mixer (°C)	Status	WiFi	Update in sec
rockpool-right-sink	27.3	21.3	25.7	online		10
female-1-back-sink	24.2	23.9	24.3	online		10
basement-1-male	24.4	24.3	24.4	online		10
rockpool-left-sink	23.8	23.3	23.7	online		10
female-1-front-sink	25.9	25.3	25.5	online		10

## Results

Following deployment, the system has been operating continuously and successfully at Sea Life London, providing facilities personnel with improved visibility of TMV performance.

Key outcomes include:

- Continuous automated monitoring
- Daily temperature reporting
- Immediate indication of device connectivity status
- Historical temperature records available on demand
- Reduced requirement for manual temperature data collection

## **Why TMV Monitors?**

Unlike periodic inspections that only capture temperatures at a single point in time, TMV Monitors provides ongoing visibility between inspections.

The system helps facilities teams:

- ✓ Improve operational visibility
  - ✓ Maintain comprehensive temperature records
  - ✓ Receive automated reporting
  - ✓ Monitor multiple locations from a central dashboard
  - ✓ Reduce time spent collecting routine temperature data
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## **About TMV Monitors Ltd**

TMV Monitors Ltd provides automated temperature monitoring solutions for:

- Care Homes
- Schools
- Hotels
- Leisure Attractions
- Healthcare Facilities
- Commercial Buildings

Our plug-and-play monitoring platform combines intelligent sensors, cloud reporting and automated alerts to help organisations improve visibility of their TMV systems.

### **Book a free online demonstration**

See how TMV Monitors can provide daily reporting, remote visibility and automated temperature monitoring across your site.

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