DMS METERING SOLUTIONS



# CASE STUDY: Heat Metering for a Heated Swimming Pool in Aberdeen

**Sector:** Sport & Leisure
**Location:** Aberdeen, Scotland
**Solution Provided:** Sontex Supercal 5S Thermal Energy Meter




## Overview

A heated swimming facility in Aberdeen required an accurate and reliable way to monitor the thermal energy being used to maintain its pool water temperature.

Swimming pools represent a significant and continuous heating demand, with energy required not only to initially heat the water but also to replace heat lost through evaporation, ventilation and the surrounding environment. For the facility, gaining greater visibility of this energy consumption was important for monitoring system performance and supporting ongoing energy management.

DMS supplied a **Sontex Supercal 5S Thermal Energy Meter** for installation on the primary heating circuit serving the pool heat exchanger.

## Project Requirements

- Accurate measurement of thermal energy supplied to the swimming pool heating system
- Reliable performance across a continuously operating heating circuit
- Suitable for the flow rates associated with a large commercial pool application
- Clear energy-consumption data for facilities and energy-management teams
- Communication capability for integration with building or energy-management systems
- Long-term reliability with minimal maintenance requirements

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## DMS Solution

### Heat Metering – Sontex Supercal 5




DMS supplied a **Sontex Supercal 5S Static Thermal Energy Meter** to measure the energy delivered through the primary heating circuit to the swimming pool heat exchanger.

Rather than measuring the chlorinated pool water itself, the meter monitors the heating water supplying the heat exchanger. By measuring flow together with the temperature difference between the flow and return pipes, the system can calculate the thermal energy being transferred to the pool.

The Supercal 5S is particularly suited to larger commercial heating applications, offering a wide range of flow rates and a static measurement principle designed for reliable long-term operation.

Its multifunctional calculator also supports a range of communication options, including **M-Bus, Modbus, BACnet and LoRaWAN**, allowing consumption data to be incorporated into a wider Building Management System where required.

For a heated swimming pool operating throughout the year, this provides facilities teams with valuable insight into exactly how much thermal energy is required to maintain comfortable pool temperatures.

## Results

The installation provided the facility with:

- Accurate measurement of the thermal energy used for pool heating
- Improved visibility of one of the site's significant energy loads
- Data to support energy monitoring and operational optimisation
- Greater understanding of heating-system performance
- A reliable metering solution suitable for continuous commercial operation
- The ability to integrate energy data into wider monitoring and building management systems

By separately monitoring the pool heating circuit, the facility can more easily identify changes in energy demand, assess system efficiency and make informed decisions around heating operation and future energy-saving initiatives.

## Why DMS?

With over 25 years of experience in heat and energy metering, DMS supports leisure facilities, commercial buildings and complex heating systems with metering solutions selected around the requirements of each individual application.

As the **exclusive UK partner for Sontex**, DMS can provide the complete Sontex range alongside technical product selection, specification support and commissioning assistance.

From swimming pools and leisure centres to district heating, commercial buildings and industrial applications, DMS provides accurate thermal energy metering solutions for virtually any requirement.

**Discover the Sontex Supercal 5S and our complete range of heat metering solutions at dmsltd.com. or scan the QR code.**

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