

# Grotherm Wireless!

Remote mixer shower sets  
new market standard



Sagentia's proven expertise in both shower and embedded systems enabled the fast-track development of 'Grotherm Wireless!', a remote control mixer shower which has set a new market standard.

Grohe, the global market leader of sanitary fittings, needed a product able to compete in a niche but growing market sector – the remote mixer shower. These showers allow the bulky processing unit, which thermostatically controls the mix of hot and cold water, to be placed anywhere on the inflow pipes (such as under the bath, in the attic or in an airing cupboard). The 'human interface', controlling flow and temperature, remains at the shower unit. This results in a shower which is considerably easier to fit, as the entire unit can be installed after tiling, and is also simple to retrofit.

Existent remote mixer showers used wires to connect the interface and processor. Grohe perceived wireless technology as a means of achieving vital market differentiation but needed expertise in low cost, low power electronics design to create a wireless solution. Grohe also wanted the new product delivered – from specification to full market launch, shelves fully stocked – in 15 months. Sagentia, with a history of successful shower projects and extensive product development experience, was asked to meet this very challenging timescale.

To satisfy the brief, Sagentia had to be extremely efficient as specification and proof-of-concept work took five months, and scale up to manufacture required six, leaving only three months to create a production design.

At the heart of the system was a Grohe wax-stat cartridge which offers high speed thermostatic control – a mix setting is automatically maintained against changes in supply pressures and temperatures. Around this were built the hydraulic, mechanic, electronic and RF systems. The result, the Grotherm Wireless!, meets all product specifications and has set a new technology standard for remote mixer showers.

The wireless design is even simpler to install than competitor products and includes new features such as additional remote interfaces to allow shower control from outside the shower cubicle. Created primarily for the UK, the design is available in pumped and high-pressure versions, and is fully compliant with European and US standards, enabling fast roll out to new markets in the future.

Grotherm Wireless! was launched to great acclaim in February 2006, on time and on budget. Sagentia continues to provide engineering support for the product, upgrading software, improving design and monitoring manufacture, to ensure the shower remains a market leader for years to come.