

Delivering innovation  
research software  
to improve product  
performance



Brookes Instruments

**Expertise and domain knowledge**

- Industrial
- Calibration
- Mathematical modelling
- Image analysis





### **Our client asked:**

Analytical mathematical modelling solved product problems and stimulated innovation for Brookes Instruments

### **The project story:**

- Sagentia Innovation developed an accurate, predictive model of the device, verified with detailed IR image analysis
- Our 'piecewise analytic' model generated equations relating to design parameters and performance criteria
- The final model was verified using data from an automated test rig, which we purpose-built, and a set of precision, infrared images of the meter itself

### **Contact us**

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### **Results: deliverables and outcomes**

- Brooks gained a custom design and analysis tool that led to a better understanding of their own and competitors' products
- The model was flexible so that alternative designs could be easily considered
- Our client was able to rapidly fine-tune the key design parameters of its product