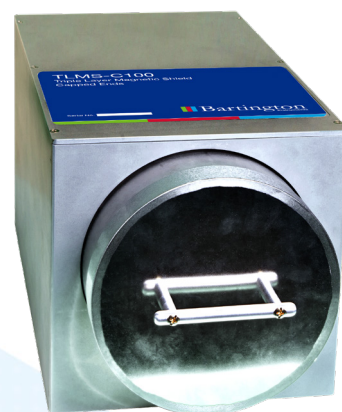
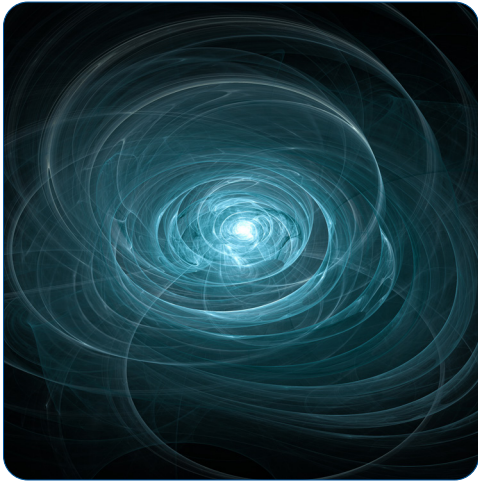


# Magnetic Shields

Very Low Magnetic Field Test Facilities





## Magnetic Shields

### Very Low Magnetic Field Test Facilities

These Mumetal cylindrical chambers divert the lines of magnetic flux around the layers, reducing the magnetic field inside them.

Capped-end versions are available, the capped-ends available in two diameters. These have additional shielding at either end of the sample chamber and so are less reliant on orientation. Either will typically attenuate the Earth's field of  $\approx 50,000\text{nT}$  to a level of a few nT, enabling the user to measure remanent magnetism in small components or errors in magnetic sensors.

Even small inhomogeneities or stresses in the shield can lead to low level magnetism accumulating inside the cylinder. This can be removed with the Bartington Instruments Degaussing Wand, which ensures that the field inside the cylinder is as close as possible to zero before critical measurements are made.



### TLMS-C100 and TLMS-C200 Capped-end Magnetic Shield Features

- Capped ends (with removable front three-layer lid) provide additional shielding for all directions, with internal diameters of 100 or 200mm
- 4mm test earth socket included

### Typical applications

- Measurement of zero-field offset errors in magnetic sensors
- Remanent magnetisation measurements

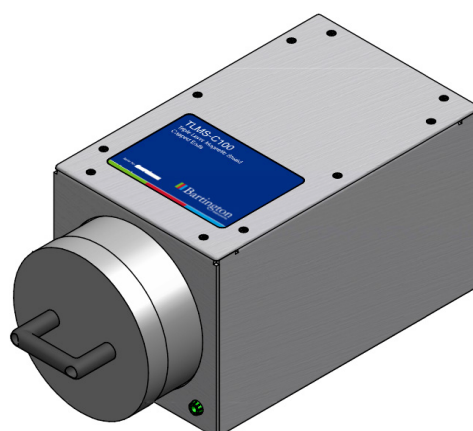
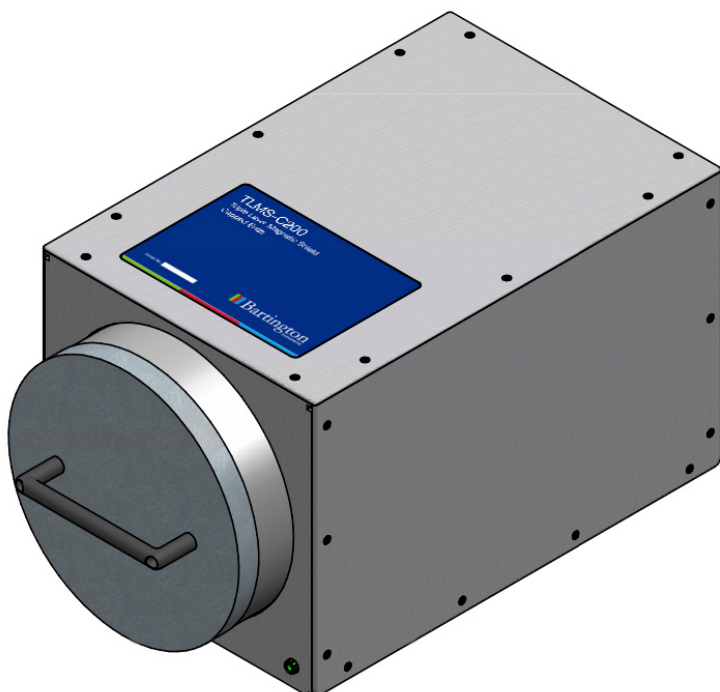
Bartington® is a registered trade mark of Bartington Holdings Limited in the following territories: Australia, Brazil, Canada, Chile, China, European Union, Hong Kong, Iceland, India, Israel, Japan, Malaysia, Mexico, New Zealand, Norway, Russia, Singapore, South Africa, South Korea, Switzerland, Taiwan, Turkey, United Kingdom, United States of America, and Vietnam.

Bartington® is used under licence by Bartington Instruments Limited.

## TLMS-C100 and TLMS-C200 Capped-end Magnetic Shield Specifications

| Shield details                      | TLMS-C100                         | TLMS-C200           |
|-------------------------------------|-----------------------------------|---------------------|
| Type                                | Triple layer                      |                     |
| Shielding material                  | Mumetal                           |                     |
| Seams                               | 6mm overlap                       |                     |
| Ends                                | Capped ends (removable front lid) |                     |
| Inner bore diameter                 | 100mm                             | 200mm               |
| Internal diameters of shield layers | 100mm, 120mm, 140mm               | 200mm, 220mm, 240mm |
| Internal length of cylinder         | 250mm                             | 400mm               |

| External case              | TLMS-C100             | TLMS-C200             |
|----------------------------|-----------------------|-----------------------|
| Material                   | Anodised aluminium    |                       |
| Overall size (approximate) | 167mm x 173mm x 369mm | 272mm x 289mm x 519mm |
| Inner packaging material   | Packaging foam        |                       |
| Weight                     | 6.8kg                 | 15kg                  |



The specifications of the products described in this brochure are subject to change without prior notice.

Bartington Instruments Ltd  
5, 8, 10, 11, 12 & 16 Thorney Leys Business Park  
Witney, Oxford OX28 4GE. England

**Telephone:** +44 (0)1993 706565  
**Email:** sales@bartington.com

 **Bartington**<sup>®</sup>  
Instruments