

# LM OPTICAL SHORT SOLENOID MAGNETS



- Low profile design
- Cryogen-free
- Fast cooldown
- Rapid ramping
- Compact
- Low mass
- Any field orientation
- 1, 2 or 3 tesla as standard

## APPLICATIONS

HTS-110's LM range is designed to meet a variety of applications:

- Magneto-optic effect measurements
- Magnetic domain imaging
- Magnetic scattering
- Magnetic circular/linear dichroism
- Hysteresis loop plotting
- Scanning probe microscopy (SPM)
- Electron microscopy
- Hall effect measurements

## PERFORMANCE AND VERSATILITY

- Rapid ramping
- Fast cool-down
- Any orientation
- Designed to accept third-party variable temperature sample probe

## OPTIONAL POLES

- Customisable range of user-changeable poles for specialist applications, with the option of adjustable pole gaps

## EASY TO USE

- Cryogen-free operation; no helium or nitrogen handling, storage, or level monitoring
- No specialist training required to operate
- Single phase electrical input

## EASY TO SITE

- Very compact low-profile magnet
- Low fringe field without active shielding
- Magnet power supply and compressor can be sited remotely up to 10 m from magnet



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**HTS-110**

# LM OPTICAL SHORT SOLENOID MAGNETS

## STANDARD SYSTEM INCLUDES

- Magnet sub-system with integrated cryocooler
- Bipolar four-quadrant power supply
- Fast up/down field ramp
- Active magnet protection electronics and energy linked to integrated temperature sensors and voltage taps
- 1 year warranty

## OPTIONS

- Closed loop field control
- Unipolar supplies available in standard and high stability configurations
- Low-vibration pulse-tube cold head options
- Extended warranty, service plan
- 19" rack
- User changeable external poles



| Model                     | Bore Size (mm) | Peak Field (T) | Height (mm) | Cryostat OD (mm) | Uniformity, 5mm DSV (rms) (%) | Mass (Kg) |
|---------------------------|----------------|----------------|-------------|------------------|-------------------------------|-----------|
| LM-40-1T                  | 40             | 1.4            | 45          | 254              | 0.4                           | 25        |
| LM-40-2T                  | 40             | 2              | 55          | 254              | 0.3                           | 30        |
| LM-40-3T                  | 40             | 3              | 100         | 254              | 0.2                           | 45        |
| LM-53-1T                  | 53             | 1.1            | 45          | 254              | 0.3                           | 25        |
| LM-53-2T                  | 53             | 2              | 65          | 254              | 0.2                           | 35        |
| LM-53-3T                  | 53             | 3              | 120         | 254              | 0.15                          | 55        |
| LM-80-1T                  | 80             | 1              | 55          | 254              | 0.2                           | 30        |
| LM-80-2T                  | 80             | 2              | 100         | 254              | 0.15                          | 40        |
| LM-80-3T                  | 80             | 3              | 160         | 254              | 0.05                          | 65        |
| Maximum operating current |                |                |             | 125 A            |                               |           |

For bare High Temperature Superconducting (HTS) coil assemblies please contact us.



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