

- Cryogen free
- Up to 14 tesla
- 54mm customer bore
- Small magnetic footprint
- Compact design



## APPLICATIONS

HTS-110's HF range is suitable for a variety of applications, including:

- MOKE (Magneto-Optic Kerr Effect)
- Variable Temperature Optical Cryostat
- Quantum Hall Resistance Standard
- Fourier Transform Mass Spectrometry

## PERFORMANCE AND VERSATILITY

- Rapid ramping (zero to full field in <300 seconds)
- Fast cool-down
- Cold-head side mounted for minimum size envelope
- System can be customised as an optical cryostat with variable temperature insert
- Designed to interface with commercial variable temperature sample probes

## EASY TO USE

- Cryogen-free operation; no helium or nitrogen handling, storage, level monitoring or pressure vessel safety issues
- No specialist training required to operate

## EASY TO SITE

- compact sized magnet
- low stray field 5 Gauss <200mm from surface
- modular compressor/power supply cabinet can be sited remotely (up to 10m from magnet)

## STANDARD SYSTEM INCLUDES: SYSTEM REQUIREMENTS

- Magnet sub-system with integrated low-vibration zero-maintenance pulse tube cold head
  - 19" rack-mounted compressor and power supply
  - Active magnet protection electronics linked to integrated temperature sensors and voltage taps
  - On-magnet energy-dump system
  - 1 year warranty
- <10 litres water per minute for compressor
  - 50/60hz, 3 $\phi$ , ~8kW (dependent on PSU)
  - User serviceable adsorber change on compressor every 20,000 hours
  - Vacuum pump for initial installation and maintenance only

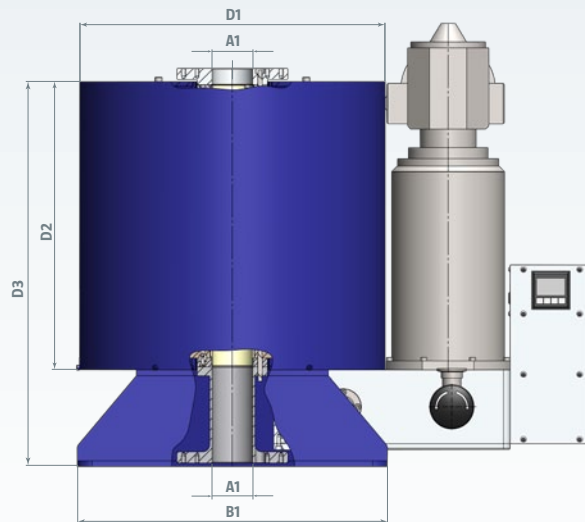
Model	Magnetic Field (T)	Bore size (mm)	5 Gauss (mm) Axial/Radial [1]	Uniformity (%) [2,3]	Yoke diameter (D1 mm)	Yoke height (D2 mm)
HF10T54	10	54	<200/100	<0.1	600	600
HF12T54	12	54	<200/100	<0.1	600	600
HF14T54	14	54	<200/100	<0.1	600	600

Notes:

- [1] 5 Gauss contour measured from magnet outer surface
- [2] Uniformity measured as peak to peak field variation over 10mm DSV
- [3] Higher uniformity available using passive shim option

## OPTIONS

- Closed loop field control system
- Unipolar and bipolar full four-quadrant power supplies available in standard and high stability configurations
- Cryomech coolers are standard; alternative coolers are available
- Air cooled compressor option
- Extended warranty option
- Service plan option



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