- Continuously variable field
- Cryogen-free
- Fast cooldown
- Compact design
- Low fringe field
- Option to vary orientation of magnet mount



APPLICATIONS

HTS-110's XT range are designed to meet a variety of applications:

- MOKE (Magneto-optic Kerr effect)
- Hall probe calibration
- VSM system
- Hall effect measurements
- Transport measurements

PERFORMANCE AND VERSATILITY

- · Fast ramping option
- Fast cool-down
- Magnet can be designed to suit customer's required sample orientation
- Large lateral sample access port.
 Multiple access ports
- Cold-head top or side mounted for maximum compatibility
- Can be designed to accept third-party variable temperature sample probe

MULTIPLE POLE OPTIONS

- · Adjustable pole gaps via shims
- Removeable poles to accommodate large axial inserts
- Customisable range of user-changeable poles for specialist applications, including high-homogeneity and tapered bore poles (for optical access)

EASY TO USE

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

EASY TO SITE

- · Compact sized magnet
- Very low fringe field
- Magnet power supply and compressor can be sited remotely, up to 10 m from magnet

HIGH-FIELD DIPOLE ANALYSIS 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

- Fast ramping options
- Closed loop field control
- Unipolar supply available in standard and high-stability configurations
- Low-vibration zero-maintenance pulse-tube cold head options
- Extended warranty, service plan
- Orientation of the magnet sample slot and pole gap dimensions can be designed for customer-specific applications

SITE REQUIREMENTS

- <10 litres/min water for the compressor
- 50/60 Hz, 3Ø, ~4–7 kW (dependent on model and options)
- Scheduled maintenance on the cryocooler every 13–20,000 hours, depending on model
- Vacuum pump for initial installation and maintenance (turbomolecular pump can be supplied as option)

Model XT	Peak field (T)	Pole gap (mm)	Sample access slot D1 (mm)	Sample access slot D2 (mm)	D3 (mm)	D4 (mm)	Mass (kg)	5 Gauss Line (m) Radial/ axial
5XT	5	10	12	100	245	400	225	0.25/0.33
6XT	6	10	12	100	265	400	250	0.35/0.55
7XT	7	10	12	100	325	400	290	0.39/0.50
8XT	8	30	27	80	365	400	320	0.65/0.75

Model XR	Peak field (T)	Pole gap (mm)	Sample access slot D1 (mm)	Sample access slot D2 (mm)	D3 (mm)	D4 (mm)	Mass (kg)	Ramp time 4 quadrant
5XR10	5	10	14	120	270	400	225	300s +
7XR05	7	5	18	130	350	480	520	360s +

Model XE	Peak field (T)	Pole gap (mm)	Sample access slot D1 (mm)	Sample access slot D2 (mm)	D3 (mm)	D4 (mm)	Mass (kg)	Ramp time 4 quadrant
5XE10	5	10	14	120	250	430	250	80s
6XE03	6	3	14	120	250	430	250	80s

For other fields and sample access dimensions please contact us.



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