

Integra the New Concept for Integrated Magnet Cryogenics

The new concept provides integrated magnet systems with low temperature insert covering the magnetic fields to 18 Tesla and the temperature regime from 7 mK to 300K. All systems fit together and are well documented from specifications to detailed drawings.

Systems

There are 4 basic system options with different content which can be ordered:

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| COMPLETE | INTEGRA SYSTEM <ul style="list-style-type: none"> • Cryostat. • Insert. • Magnet or zero field option. • Isobus Master and Slave cables supplied for all instruments. |
| CRYOMAG | INTEGRA SYSTEM <ul style="list-style-type: none"> • Cryostat. • Magnet or zero field option • Isobus Master and Slave cables supplied for all instruments. |
| INSERT | INTEGRA SYSTEM <ul style="list-style-type: none"> • Insert. • Isobus Master and Slave cables supplied for all instruments. |
| PROBES | INTEGRA SYSTEM <ul style="list-style-type: none"> • Spare probes or experimental inserts for INTEGRA inserts. |

Cryostats

There are a vapour shielded cryostat providing the best access and a low loss liquid nitrogen shielded cryostat available.

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| DE100 | DE100 SMD10/15/VS/EX and MSSSMD10LPF for INTEGRA systems. |
| DE200 | DE200 LLD1 liquid nitrogen shielded low loss dewar for INTEGRA systems: |

If there is no magnet there are 3 optional tail sizes CR100 to CR300.

Magnets

The magnets options range from 8 Tesla at 4.2 K to 18 Tesla

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| MF100 | MF100 S08/10/52/13 superconducting magnet for INTEGRA systems: |
| MF110 | MF110 S10/12/52/13 superconducting magnet for INTEGRA systems: |
| MF120 | MF120 S12/14/52/13 superconducting magnet for INTEGRA systems: |
| MF130 | MF130 S14/16/52/13 superconducting magnet for INTEGRA systems: |

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| MF140 | MF140 S15/17/52/13 superconducting magnet for INTEGRA systems: |
| MF150 | MF150 S16/18/52/13 superconducting magnet for INTEGRA systems: |

Inserts

There are three types of inserts:

Variable temperature insert

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| IN100 | IN100 VT151/30 variable temperature insert for INTEGRA systems: |
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Heliox ³He inserts

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| IN200 | IN200 HelioxVL ³ He insert for INTEGRA systems: |
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KelvinoxMX dilution refrigerators

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| IN300 | IN300 KelvinoxMX40 dilution refrigerator insert and IGH for INTEGRA systems: |
| IN310 | IN310 KelvinoxMX100 dilution refrigerator insert and IGH for INTEGRA systems: |
| IN320 | IN320 KelvinoxMX400 dilution refrigerator insert and IGH for INTEGRA systems: |

The options and probes of the inserts are covered in the brochures and the drawings. Detailed valid specifications are given in quotations.

Accessories

Transfer tubes, LabView Software and electronics rack are part of the accessories of the systems.

All systems will be quoted complete with communication cabling and virtual instruments for LabView. Full installation is also part of any package offered.

Drawings

The following list of drawings will define all items.

- Complete System Example (VTI51_30 and SMD)
IN100+SS400+DE100+MF110+LC100.pdf
- Complete System Example (HelioxVL and LLD1) IN300+EX100+CH100+ 2
LS100+DE200+MF150+LC100.pdf
- Complete System Example (HelioxVL and SMD) IN200+SA310+CH100+ 2
LS100+DE100+MF130+LC100.pdf
- Complete System Example (KelvinoxMX and SMD)
IN320+EX310+DE100+MF110+LC100.pdf
- Complete System Example (KelvinoxMX and LLD1)
IN300+EX100+DE200+MF150+LC100.pdf
- Cryostats and Magnets DE100 (SMD, MSS and Magnet).pdf
- Cryostats and Magnets DE200 (LLD1 and Magnet).pdf
- Insert IN100 (VTI51_30).pdf
- Insert IN200 (HelioxVL).pdf
- Inserts IN3nn Kelvinox MX.pdf
- Probes SSnnn (VTI Sample Rods).pdf
- Probes EXnnn (MX Exp. Inserts).pdf
- Room Layout KelvinoxMX400 Example.pdf

For any questions please do not hesitate to ask.