

The Business of Science®

# **Teslatron**™PT

The magnet is only the beginning



**Teslatron**PT – the **Cryofree**® measurement platform

- **Flexible** a wide range of experimental inserts to suit many applications
- Configurable match the system capability to suit your needs and budget
- Powerful get millikelvin temperature in your standard system
- **Upgradeable** start with a simple system and add extra capability as your experiments evolve

### Why choose **Teslatron**PT?

Whatever your experimental need for variable magnetic field and temperature is, **Teslatron**PT – the **Cryofree** integrated magnet system has the solution. The wide range of different experimental inserts enables you to configure your measurement platform for cutting-edge applications, such as 2D materials, nano-structures and superconducting devices.

#### Unique system features, by design:

- Wide range of standard magnets with fields up to 14 T (up to 18 T available on request) in a compact geometry
- High grade, low hysteresis loss Nb<sub>3</sub>Sn superconducting wire to offer the minimum field hysteresis via remnant field, and minimised low field flux jumping
- Integrated variable temperature insert providing sample temperatures between 1.5 and 300 K
  - Protects your sensitive samples from gas flow with static exchange gas cooling
  - Blockage-free operations using a sealed circulation loop separate to the sample exchange gas

#### Insert features and options:

• Wide range of high performance sample rods with height adjustment and rotation options

 Select from different options for DC and RF wiring to the sample

- Special rotation probes for graphene research with sample in vacuum and 400 K upper temperature
- Extend the base temperature range to < 300 mK with the HelioxVT <sup>3</sup>He refrigerator
- The **Kelvinox**JT dilution refrigerator provides a fully cryogen free system with a temperature range of <25 mK to 300 K</li>



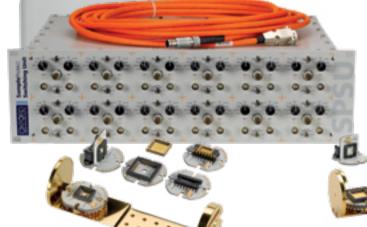
# **Mercury**iTC temperature controller and **Mercury**iPS magnet power supply

- Optimised for integration with the **Teslatron**PT
- Intuitive touch screen interfaces and remote software control allowing direct and remote control of your **Teslatron**PT system
- The **Mercury**iTC programmable temperature controller has the best-in-class measurement capability via constant voltage excitation
- The MercuryiPS features a bi-polar, high-stability, four quadrant power supply and on board temperature sensing for diagnostic monitoring of magnet temperature
- Connectivity and control via multiple remote interfaces

## Our support to you

Because Oxford Instruments is unique in designing and manufacturing the complete system, we offer unrivalled support and expertise for your **Teslatron**PT system through our regional Customer Support teams backed by unmatched factory expertise.





TeslatronPT



Main service locations: UK, USA, Germany, China, Japan and India

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