MMR Variable Temperature Hall System

MMR's Variable Temperature Hall System (VTHS) allows the user to make automatic measurements of resistivity, mobility and carrier concentration of a wide range of samples using the Van der Pauw method over a temperature range from 80K to 580K. Sample mounting is simple and allows rapid interchange of samples. The VTHS Hall Measurement Controller, the H-50, is compatible with a variety of computers through an IEEE-488 (GPIA) or RS-232 interface. MMR's Benchtop Electromagnet and Programmable Power Supply complement the VTHS.

Features:

- Operating Temperature: 80 K to 580 K
- Guarded Triax Leads
- H-50 interfaces with MMR's Low Temperature Dewar
- H-50 interfaces with MMR's K-20 Programmable Temperature Controller
- H-50 interfaces with two different MMR electromagnets, allowing maximum flexibility in sample analysis.
- Hall magnetometer in Dewar included in system
- Full software provided for all measurements
- Power Input: 110 V, 60 Hz and 220 V, 50 Hz
- Magnet field up to 8,000 Gauss
- Temperature Stability: ± 0.05 K with K-20 Programmable Controller
- Temperature Response: 1 K/sec
- Cooling Capacity: 250 mW at 85 K with nitrogen; 500 mW with Ar at 90 K
- Cold Pad Size: 14 mm x 10 mm
- Standard Window Material: Fused silica
- Guarded triax leads to sample
- Four sample leads for Van der Pauw measurements
- Extra BNC lead for heater Seebeck measurements
- Simple sample mounting
- Integral Hall sensor at sample site