



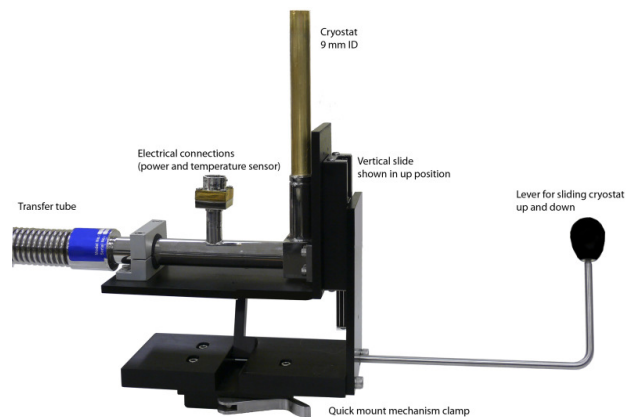
## Model EV1-HE Temperature Options for the EV series of VSMs

The EV1-HE temperature chamber is designed for VSM measurements at temperatures starting at 4.2 K.

The open flow cryostat allows for fast sample changes and does not significantly influence the system noise or background signals.

When used with the EV1-N2Dew option, this cryostat can also be used for measurements using liquid Nitrogen.

The large 9 mm ID of the temperature chamber allows larger samples (with almost 2x more signal) than possible in most competing systems, and this large ID also makes it easier to do angle dependent measurements without the risk of having the sample touch the walls of the temperature chamber.



*EV1-LHE temperature chamber*

Similar to our other temperature options, the EV1-LHE cryostat is mounted on a vertical slide, making it easy to move the cryostat down and out of the way when it is not needed or when you are changing the sample or up and around the sample when you want to perform a low temperature measurement. The whole assembly uses a quick connect clamp to mount the cryostat in the system or to remove it and replace it with one of the other temperature options.

Because of the high quality vacuum insulation and materials used, the system walls don't need to be pumped before every measurement (as is common in some other systems). This further adds to the ease of use of this cryostat.

### N2 DEW

The N2 DEW option includes a 50 liter liquid Nitrogen Dewar and an adaptor to use this Dewar with the EV1-LHE option. Also included are a rolling base for the Dewar and a power supply and heater element to slowly boil-off the liquid nitrogen to provide pressure and gas for the cryostat.

### Specifications

Temperature range with Helium	4.2K, 6K-450K
Temperature range with Nitrogen	77.6K, 83K-450K
Temperature Resolution	0.001K
Temperature Stability	0.1K (He), 0.2K (N2)
Helium Use	<1 l/h for temperatures over 8K
Sample zone inside diameter	9 mm
Temperature Sensor	Silicon Diode
Cool down time	10 minutes initial 5 minutes after initial cool down



Liquid Nitrogen Dewar