

Probe (sample) sensors

Sensors	Location	T range	Wiring and Measurement
Speer	Top of sample		Probe top 10 pin fisher, channel 2 on other end, use lock-in & Keithley M.M.
Platinum	Top of sample	R.T. – 60 K	24 pin fisher, pairs of 17,19 and 21,23, use Stanford lock-in (1V or 0.1 V through 1M Ω , 3 times 100 ms time constant, 19 Hz frequency). There is a current input in the program log_monitor.vi.
RuO ₂	On square flange	Below 7K	10 pin fisher, channel 3, use ITC sensor 2 input

Insert fisher connector 1 (upper one)

Sensors	T range	Wiring and Measurement
Sorb heater		10 pin fisher, channel 3, use ITC sensor 1 input
Sorb 100 Ω AB	High T	10 pin fisher, channel 3, use ITC sensor 1 input
1K RuO ₂	Below 7K	10 pin fisher, channel 2, use ITC sensor 3 input

Insert fisher connector 2 (lower one)

Sensors	T range	Wiring and Measurement
3He port heater		10 pin fisher, channel 3, use ITC sensor 1? input
3He RuO ₂	Below 7K	10 pin fisher, channel 2, use ITC sensor 2 input

The ITC temperature controller is set up as follows:

Sensor 1 Sorb Allen Bradley

Sensor 2 Low T sensor – Probe or He3 tail

Sensor 3 1K pot RuO₂