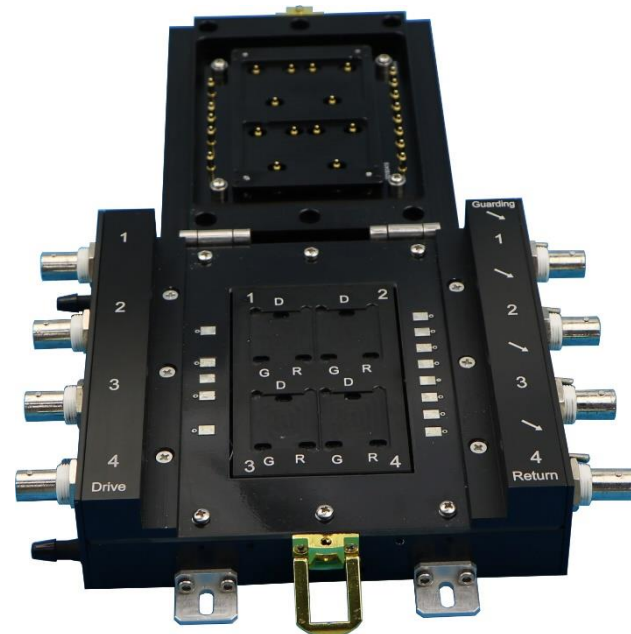


The TP102LC4 allows for temperature controlled Automatic Liquid Crystal Testing (ALCT) measurements to be made with low electrical noise and low leakage. Four cells can be loaded into the TP102LC4 for properties testing while maintaining a constant chamber temperature (opening the lid between samples is not required). This chamber is designed specifically for use with Instec's S-type and SG-type LC cells. When used together with guarding cells (SG-type), a voltage can be applied to the guarding electrode to reduce parasitic capacitance and enhance measurement accuracy



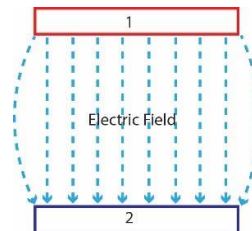
Features

- Programmable precision temperature from -30°C to 90°C
- Precise solid-state heating and cooling
- Precisely controlled heating and cooling rate
- Electrical shielding
- BNC connections built-in for easily application of electrical fields
- Linear Variable DC drive is used to eliminate electrical noise during heating for low current measurements
- Up to four LC samples can be heated/cooled and measured simultaneously by ALCT

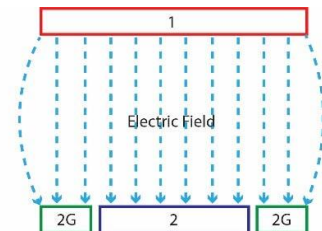


Technical Specifications

Temperature Range	-30°C to 90°C
Temperature Resolution	0.01°C
Temperature Stability	±0.05°C at 37°C
Minimum Heating and Cooling Rate	±0.01°C per minute
Maximum Heating Rate	15°C/minute at 37°C
Maximum Cooling Rate	-10°C/minute at 37°C
Temperature Control Method	Linear Variable DC PID
Temperature Control Sensor	100 Ω Platinum RTD



S-type and D-type cells



SG-type and DG-type cells