

In this selection guide, you will find a list of available measurements along with corresponding ALCT models which perform them. Instec ALCTE-*** configurations are available for each of the models below to academic customers only. These models offer the same or similar functionality as their industrial ALCT-*** counterparts, but at a reduced cost to help facilitate growth in fundamental liquid crystal research. Many of the features below can be ordered as single-feature systems, or selected together to create a customized configuration. Contact Instec with your requirements.

	ALCT-PP1	ALCTE-PP1 ¹	ALCT-K22-1	ALCT-PG1	ALCT-NG1	ALCT-FLC1	ALCT-E01S	ALCT-IV1	ALCT-IV1-nC ²	ALCT-IR1-nC ²	ALCT-HR1 ²	ALCT-FFSIPS ²
For Positive Dielectric Anisotropic NLC:												
· Threshold Voltage	•	•										
· Splay and Bend Elastic Constants, K_{11} & K_{33}	•	•										
· Twist Elastic Constant, K_{22}			•									
· ϵ_{\perp} and ϵ_{\parallel} Dielectric Constants	•	•										
· Rotational Viscosity, γ_1		•		•								
For Negative Dielectric Anisotropic NLC:												
· Threshold Voltage	•	•										
· Splay and Bend Elastic Constants, K_{11} & K_{33}	•	•										
· Twist Elastic Constant, K_{22}			•									
· ϵ_{\perp} and ϵ_{\parallel} Dielectric Constants	•	•										
· Rotational Viscosity, γ_1					•							
For FLC:												
· Spontaneous Polarization		•				•						
· Electrical Switching Time		•				•						
· Rotational Viscosity		•				•						
· Ion Density and Mobility		•				•						
· Electrical Resistivity		•				•						
· Dielectric Constant		•				•						
· Electro-optic response							•					
LCD Quality Control Measurements												
· Ion density								•	•	•		•
· Voltage Holding Ratio (VHR)								•	•	•		•
· Residual DC (RDC)								•	•	•		•
· Resistivity (high resistance)											•	
· TFT Panel Testing										•		•

1. The ALCTE-PP1 offers an additional set of features compared with the ALCT-PP1 and thus is listed separately. All other ALCTE models share the same set of features with their industrial counterparts.

2. These models can be configured for multi-channel (up to 16) measurements.