

With the advent of projection and direct-view large-sized liquid crystal monitors and televisions, the vertically aligned mode liquid crystal display has become prominent. These displays depend on negative dielectric liquid crystals. One of the most critical parameters for any LC is  $\gamma_1$ , the rotational viscosity, which greatly influences the time response of the display. However, measuring the rotational viscosity of negative dielectrics has traditionally been difficult. This is due to backflow and other such switching phenomena. Instec designed the Negative Nematic Liquid Crystal  $\gamma_1$  (NNLCG1) test instrument specifically to overcome this problem. With it, one can quickly and accurately measure the rotational viscosity of negative dielectric materials in seconds.



The rotational viscosity is a parameter particularly sensitive to temperature. As with all Instec liquid crystal measuring instruments, the NNLCG1 integrates easily with either the ALCT4-TS temperature controlled shielding box or the

## Technical Specifications

Output Wave	1KHz, voltage 0 to $\pm 100V$
Output Update Rate	500KHz
Output Resolution	16 bit
Input Resolution	16 bit
Input Sample Rate	500KHz
Current Measurement Range	1nA ~ 1mA
Current Sensing Resistance	10K $\Omega$
Current Resolution	100pA
Post Gain in the ALCT Box	1, 10, 100, 1000
Capacitance Measurement	2pF to 100nF

## Easy-to-Use Software

