Technical Specification for

Thermal Conductivity Tester for NanoFluids

Sl.	Description	Required Parameters
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The equipment should be capable of measuring thermal conductivity of NanoFluids . The		
equipment should also have the capability of measuring other parameters like thermal		
diffusivity, thermal resistivity and volumetric specific heat of Fluids.		
		To measure thermal conductivity
Product application		and thermal diffusivity of Nano
		Fluids
1.	Thermal Conductivity Range (minimum)	0.02 to 2.0 W/ mK
2.	Thermal Diffusivity range (minimum)	$0.1 \text{ to } 1.0 \text{ mm}^2/\text{s}$
3.	Temperature range	-20 deg C to 120 deg C
4.	Measurement Time	To be specified
5.	Accuracy Range	5 % Max.
6.	Precision Range	5 % Max.
7.	Method of measurement (Provide details	Transient Heating Method
	of Testing standards complied)	
8.	Data storage capacity	Minimum 2000 measurements
9.	Sample preparation for the measurement	To be specified
10.	Power requirement	220 v, 50 hz. Power supply
11.	Whether the equipment can measure	To be specified
	thermal conductivity for solids and powders	
12.	Basic software for interfacing with a	To be provided by the supplier .
	computer and downloading data (The computer will be arranged by
	compatible with MS office system)	BHEL at site

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