

Vendors are requested to send the Quotation along with compliance certificate on or before 14th February, 2019.

Item name: Software enabled data acquisition System-I

Item Specifications	
Data Acquisition Hardware with supporting software (2-channel)	<ul style="list-style-type: none"> • DAQ should be based on 4-channel digitizer capable to measure transient signals
	<ul style="list-style-type: none"> • Four Simultaneously Sampled analog inputs, high resolution measurements up to 5 MS/s/ch
	<ul style="list-style-type: none"> • 4 input ranges: ± 10 VDC
	<ul style="list-style-type: none"> • 4 input BNC connector
	<ul style="list-style-type: none"> • The DAQ should allow up to 128 Mbits of measurement data to be transferred to the controller
	<ul style="list-style-type: none"> • DAQ should have three acquisition modes: continuous mode, record mode, and advanced mode.
	<ul style="list-style-type: none"> • -40°C to 70°C temperature range to meet a variety of application and environmental needs
	<ul style="list-style-type: none"> • Overvoltage protection: ± 30 VDC
	<ul style="list-style-type: none"> • 1-slot Ethernet portable chassis for PC interface
	<ul style="list-style-type: none"> • Trigger modes to be supported
	<ul style="list-style-type: none"> • Power connection to chassis with screws
	<ul style="list-style-type: none"> • DAQ should meet Safety & Hazardous standards, Electromagnetic compatibility, CE compliance
	<ul style="list-style-type: none"> • DAQ should meet Shock & Vibration as per standards "Random IEC 60068-2-64", "Sinusoidal IEC 60068-2-6", "Operating shock IEC 60068-2-27"
	<ul style="list-style-type: none"> • Digitizer Modules should be versatile enough for both high-speed and high-resolution time and frequency domain measurements
	<ul style="list-style-type: none"> • Software: 2-channel Software, Single user application
	<ul style="list-style-type: none"> • Software: On-line time domain graph, display and recording
	<ul style="list-style-type: none"> • Software: Frame by frame playback for post processing
	<ul style="list-style-type: none"> • Software: Frame by frame calculation of RMS, peak energy level, Kurtosis, Crest Factor, Skewness
	<ul style="list-style-type: none"> • Software: Fast Fourier Transform analysis with cursor to measure frequency and amplitude value
	<ul style="list-style-type: none"> • Software: Sorted list of all peak amplitudes with its frequency
	<ul style="list-style-type: none"> • Software: Microsoft windows compatible measurement analysis software
	<ul style="list-style-type: none"> • Item should have minimum One-year comprehensive warranty
	<ul style="list-style-type: none"> • Installation and training: Free of cost at IIT Madras

The software enabled data acquisition system-I having the above mentioned specifications **should be compatible and successfully integrable** with the Acoustic Emission Sensor (100-900 kHz) of KISTLER make (type: 8852A103031N2). The compliance report must include a statement in support of this.

Anitha Siva

S. P. S. S. S.

G. S. S.