

**Item Name: High Precision Load Cells for Dynamic Load with Signal conditioners/inline amplifier**

Technical Specifications:

1. Miniature Load Cell:  
Two units : 50 N and 500 N (one each) –  
for Measurement of Tensile and Compressive Force with inline amplifier  
**accuracy class: 0.2**  
Nominal Sensitivity 1mV/V or superior
2. Miniature force transducers for compressive force measurement with inline amplifier  
**Accuracy class: 0.2**  
Two units : 50 N and 500 N
3. High Precision Tension Compression Load  
Range 1.25kN (one unit)  
**accuracy class: 0.02 to 0.05; With Suitable amplifiers**
4. 3-Axis Load Cell (One Unit)  
Accuracy class 0.1  
Range 1000N (main); With Suitable amplifiers
5. Signal conditioners (2 Units)  
**Accuracy class: 0.01**  
**Measurement inputs:** Full-bridge and half-bridge strain gauges, piezoresistive transducer, potentiometer, Pt100, current, and voltage **Interfaces:** analog (V/mA,) digital-I/O,

**Terms and Conditions:**

- The equipment must have One Year warranty. Quote must include warranty and AMC cost for the 2<sup>nd</sup> and 3<sup>rd</sup> Year. Total cost for 3 years will be considered for the finance bid price comparison.
- The Quote must also include installation and delivery at IIT Madras.
- All necessary manuals, perpetual license of software (necessary for operation and maintenance) must be provided. Software Key must be provided for installation at other systems, in case of fault in the supplied system or software reinstallation situations.
- The ONE DAY training on the equipment utilization and maintenance must be provided.
- The bidder must either be OEM or legal representatives of the OEM in India
- Quote must include essential cables, connectors, standard samples, consumable needed.
- The supplier must have supplied and installed similar equipment / instrument of at least 3 in last 3 Years. Proof of supply and installation and location of the installation must be mentioned in the quote.