

## Coulter counter

Tender is invited for the procurement of Coulter Counter according to the specifications below.

### Requirements

Specification	Value
Measurement Principle	Electrical impedance based (Coulter Principle)
Overall Particle Size Range	0.2 µm to 1600 µm diameter or larger range
Aperture Diameter	Should be compatible with 10 µm to 2000 µm apertures (nominal diameters) or larger. The supplied device should include 10, 20, 30, 100 and 560 micron aperture tubes
Aperture Dynamic Range	Standard 1:30 (by diameter), Total 1:40 (by diameter) or better
Aperture Range	Total range: 2% to 60% of aperture diameter or better
Resolution	Should be user selectable
Number of Channels	Up to 400 size channels or better for a selected pulse range. It should be possible to change the number of channels and reprocess the range, as necessary.
Electrolyte Solutions	Should support both aqueous and non-aqueous electrolyte solutions that are compatible with aperture technology, glass, fluoropolymers, Fluorelastomers and stainless steel.
Pulse Data	Time stamped pulses should be available.
Size Distribution Data	Size distribution by diameter, volume, and area
Pulse Distribution Data	Pulse distribution by time, sequence and width for pulse height diameter, pulse height volume, pulse width, pulse area. Number distribution by width
Linearity	± 1% for diameter, ± 3% for volume or better
Aperture Current Range	30 µA - 6000 µA in 0.2 µA steps
Aperture Current Accuracy	± 0.4% of setting or better
Polarity Error	Should be less than 0.5%
Time Mode	up to 900 seconds or better
Total Count Mode	op to 500,000 counts or higher
Volumetric Mode	Continuously selectable from 50 µl to 2000 µl
Metering System	Mercury-free metering pump
Volumetric Pump	Accuracy of 99.5% or better
Input voltage within set ranges	Should be compatible with 220 VAC and 50 Hz frequency
Operating Temperature	5°C to 40°C
Relative Humidity operating range	30% to 85% (non-condensing) or better

**General Terms & conditions**

- Vendor should have supplied at least 3 scientific / industrial Coulter counter systems of the similar class defined by key specifications in Indian institutes like IIT's, IISER's etc in the last 5 years. Vendor should provide proof of installation and maintenance of such systems. Proof can be provided as reference letters from the users of the systems.
- Service Personnel to provide efficient local service support with at least 2 Service engineers. The training certificate from the manufacturer should be provided to prove the capability of the service engineer
- System must have installation and on-site training included
- Compliance statement should be enclosed with the quotation.
- Vendor to quote for AMC from a user beyond 3 years, separately for each year upto 5 years.
- Authorization letter should be furnished along with the quotation.
- System should have minimum 3-year standard warranty.

**Warranty**

- Min warranty period: 3 years.

**Support and Service**

- Technical support should be available preferably through Indian counterparts

**Training**

- Training on this system should be provided free of any additional cost

**Shipping and Handling**

- FOB prices should quoted with
- Insurance
- Delivery time.

**Authorization**

- Authorization from OEM authorizing local vendor, to be produced.

**General Terms & Conditions**

The vendor should have supplied a system of a similar or a higher specification to Indian institutes like IITs, etc. or, to a reputed foreign institute in the last 5 years. The vendor should provide the contact details of the user of such a system. The vendor should provide proof of installation and maintenance of such systems. Proof can be provided as reference letters from the users of the systems.