

Chapter 8: Specification and Allied Technical Details (Item No. 3)

Revised Technical Specification after Pre-Bid Meeting January 2017

Name of the Item: Fluorescence Activated Cell Sorter (FACS) along with a Flow Analyser

Sl. No.	Revised Technical Specification (After Pre-bid Meeting)
1	Lasers
1a	Lasers should have fixed Optical Bench and lasers with wavelength ranges from minimum of 488nm to 633nm with minimum of 3 lasers or more such as 488nm Blue laser; 561 YG laser and 633 Red laser. System should be capable of simultaneous operation of all the quoted lasers. The system must have provision for future upgradability with more lasers.
2	Parameters
2a	Provided with Forward Scatter, Side Scatter & at least simultaneous 09 or more colors/ Fluorescence Detectors.
2b	Should have a Fixed Align/ minimum align Optics with Optical arrays of Octagon and Trignons, Cuvette based or Jet in Air. If the quoted model requires users to manually adjust the alignment, the vendor will be obliged to train Institute personnel to perform alignment.
2c	Should have Analysis speeds of up to 100,000 events / second or more
2d	Should exhibit Sorting speeds of up to 70,000 events / second or more
2e	Fluidics cart should include sheath, waste, and cleaning containers
2f	Minimum two way and/ or four way sorting into 12 x 75-mm, and 15 mL tubes/microtubes or better
2g	Automated cell deposition unit (ACDU) module provided with automated sorting into 6, 24, 48, 96, and 384-well plates and slides
2h	Should contain sample injection chamber for various sample input tubes, including microtubes, 12 x 75-mm, and 15 ml tubes or better
2i	Nozzle size should be in the range of 70, 85, 100, and 130-micron sizes or more
2j	Purity: minimum purity of 98% post sorting is must
2k	Sample injection volume should be minimum 20µl to 4ml or better
2l	Should have facility of size exclusion and non-clogging or non-clumping of cells
2m	Proper color compensation with no overlapping of different colors/ wavelengths.

2n	Suitable latest software (2Nos.): one with instrument for instrument operation and data management and the other one for analysis
2o	Should be supplied with suitable sheath fluid
3	Work station and Data Management System :
	Should provide suitable work station with latest version of device compatible with the system with following requirements or similar/better:
	a) Processor: Xeon 3.6GHz
	b) HDD: 1TB with RAID 5 (mirror)
	c) OS: Microsoft latest 05 to be compatible with the supplied software.
	d) Display: 23'' LED Monitor
	e) RAM: 8GB upgradable to 16GB
4	General
4a	The company must supply a latest Flow Analyser with all standard application features along with the FACS. The company should provide 3 laser flow analyser with suitable optics to test the samples before sorting
4b	On-site Comprehensive Warranty for the Equipment for 5 (five) years after successful installation and commissioning.
4c	Suitable Online UPS (inductive load) with built-in isolation transformer with minimum 2 (two) hours back-up time under full load for complete system will be required.
4d	The company should clearly specify the pre-installation requirements
4e	The company should provide consumable for minimum of 100 reactions at the time of installation
4f	The company should provide additional sheath fluid of at least 100 liters or more
4g	Detailed list of users in India and especially in North East region with contact details should be given.
4h	All necessary components / accessories required for installation and smooth running of the equipment to be quoted.
4i	Training on operation and maintenance of the machine are to be imparted by the firm during installation and commissioning.
4j	Bidder should ensure availability of spares for at least 10 (ten) years.
4k	Annual Maintenance Contract (AMC) for 5 (five) years with 2 (two) preventive and 1 (one) break down visit minimum. The rates will be obtained but not included in the total cost for price comparison.
4l	Insurance coverage and liaising with insurance company for any matter will be the responsibility of the supplier up to the installation of the instrument
4m	In addition to the original Installation, the company should install the analysis softwares in 2 Institute computers separately.
	NOTE: 1. Earnest Money Deposit (EMD) is revised to Rs. 4.00 lakhs for this equipment. All other terms and conditions of tender document except the above Chapter 8, Item No. 3 and revised EMD will remain same. All prospective bidders may quote accordingly.