

Department of Optoelectronics
University of Kerala, Kariavattom Campus,
Thiruvananthapuram-695 581
Kerala State, India

No: SERB/EQ/004/2014-15

30/12/2014


Quotation Notice

Competitive quotations are invited from reputed manufacturers/authorized distributors for the supply of **one number of each** of the item listed below.

No	Item	Specification	Remarks
1	Fluorescence Microscope	(a) 10 μ s to 20 ms exposure time per frame (b) Ten of three light excitation module generating measuring and actinic light (tunable light spectra) (c) Multiple fluorophore imaging (d) 70% peak quantum yield with about 4 electrons readout noise (e) Automated software based system operation (f) Spectrally resolved or ultrafast (μ s) spot measurements of fluorescence and absorbance kinetics.	Steady state fluorescence Multicolor fluorescence Fast fluorescence induction with 1 μ s resolution Microscope body option: Axioimager M2 and Axioscope A1
2	Photo Multiplier Tube (PMT) and accessories	Spectral Response: 185 nm-900 nm Luminous Sensitivity (Cathode) : 350 nm (min) Luminous Sensitivity (Anode) : 1000 Nm (min) Rise time: 1.4 ns Ripple noise peak to peak (max): 0.5 mv Dark current: 10 nA	High sensitivity in UV to near IR range
3	Helium-Neon Lasers	(a) Laser wavelength: Green Laser Power: 2 milliWatts Operating Voltage: 120-240 V Beam area:0.83 mm ² Beam Divergence: 0.8400 millirad	Wavelength Range: 543 nm Polarized output, Internal Power supply
		(b) Laser Wavelength: Red Laser Power: 2 milliWatts Operating Voltage: 120-240 V Beam area:0.8100 mm ² Beam Divergence: 1 millirad	Wavelength Range: 633 nm Polarized output, Internal Power supply
4	Digital Storage - Oscilloscope	Maximum Bandwidth : 500 MHz Real time Sampling rate:5GSa/S Dual sampling modes Three input impedance selections 4 channel requirement. 25K Points memory	Large 8 inch SVGA TFT LCD Screen with advanced digital signal processing technology. Visual Persistence Oscilloscope (VPO)

		for each input channel. Power measurement software. Serial bus triggering and decoding software supporting.	technology to display less-frequently occurred channels.
5	LED Light Source	(a) Blue 447 nm, (b) Red 617 nm, (c) Cool white, (d) Warm white and (e) Tri color lamps	One each. Panel size (20 cmx20cm)
6	Bench top (Mini) Freeze Dry Systems (Lyophilizer)	(a) 2.5 liter capacity cascade type freeze dry systems. HCFC/CFC free type, LCD display (for both temperature and pressure), Alarm alert during power interruption, servicing needs and other events.	Condenser volume 2.5liters Condenser performance : 1.2 kg/24 hrs Maximum condenser ice capacity 1.5 kg Maximum sample capacity 1.5 liters Condenser temp: minus 80°C±5°C
		(b) Standard drying chamber with stainless steel body and clear acrylic cover.	With 12 or 16 ports and no shelves capable of accommodating glassware of any size.
		(c) Fast freeze flasks (vials)	Made from borosilicate glass with silicone rubber tops. Wide mouth design with caps (vial type) 2 ml, 5 ml, 10 ml capacity.
		(d) Rotary vane vacuum pump Connect tube and accessories.	Motor: TEFC Duty cycle: Continuous Maximum Temperature : 40°C Power: 115/230 VAC,50/60 Hz Oil Capacity : 0.7 Liters

Kindly quote the lowest price for the above items. Rate quoted should be inclusive of taxes, transportation charges and other charges if any. **Sealed quotations** should reach **by post** to the undersigned on or before **22-01-2015** by **5:00 pm**. **Dr.Yamuna.A, Principal Investigator (SERB Project), Post Bag No.32, Department of Optoelectronics, University of Kerala, Kariavattom Campus, Thiruvananthapuram, Kerala, India.**


Dr. YAMUNA.A
 Assistant Professor & Principal Investigator SERB Project
 Department of Optoelectronics
 University of Kerala, Kariavattom Campus
 Thiruvananthapuram, Pin - 695 581