

Annexure A

Technical Specification for Multimode Microplate Reader	Criteria matching(Yes/No)	Remarks
Make and Model		
<ul style="list-style-type: none"> The Multimode reader should be completely monochromator based with following Detection Chemistries (No Filters or any other technology other than monochromator) UV-VIS Absorbance, Fluorescence Intensity (Top and Bottom), & Luminescence. 		
<ul style="list-style-type: none"> System should offer excitation light source as Xenon Flash lamp. 		
<ul style="list-style-type: none"> System should have cooled PMT for Fluorescence & Luminescence & Only Silicon Diode for Absorbance. 		
<ul style="list-style-type: none"> The system should have advance cooled PMT for Fluorescence and Luminescence to reduce background noise for excellent sensitivity and wide dynamic range. 		
<ul style="list-style-type: none"> System should offer temperature independent Path Check Sensor correction facility to automatically normalize well absorbance equal to 1cm path length of a cuvette for spectrophotometric data's without any internal fitting algorithm. 		
<ul style="list-style-type: none"> Well Scanning up to 20x20 in all modes should be possible. 		
<ul style="list-style-type: none"> System should offer programmable Orbital microplate shaking methods. 		
<ul style="list-style-type: none"> System should offer temperature control in the microplate chamber from 5°C above ambient to 65 °C or Better. 		
<ul style="list-style-type: none"> System should offer ability to read 6 to 384 well plates. 		
<ul style="list-style-type: none"> The system should have built-in near-field communication (NFC) functionality in the reader enabling to pull up custom protocols with a single tap or similar technology should be available. 		
<ul style="list-style-type: none"> The system should be quoted with low volume (2 µl) plate to read minimum 24 spots at a time. 		
<ul style="list-style-type: none"> System should perform Spectral Scanning, Kinetic Reading and End-point reading. 		
<ul style="list-style-type: none"> The system should be supplied with latest data analysis software. 		
<ul style="list-style-type: none"> The system should have inbuilt high-resolution touchscreen interface with embedded touch software allowing to set up custom protocols, take advantage of preloaded protocols and experiment. 		

Absorbance photometric performance :		
a. Wave length range – 230- 1000		
b. Wavelength Selection: Monochromator, tunable in 1.0 nm increments.		
c. Dynamic Range: 0-4 Abs or better.		
d. Bandwidth : 4 nm for entire wavelength.		
Fluorescence Performance :		
a. Reading Capabilities: Top & bottom of a Microplate		
b. Wavelength Range: 250 – 850 nm or Better.		
c. Wavelength Selection: Monochromator , tunable in 1.0 nm increments.		
d. Dynamic range > 5 logs or better.		
e. Sensitivity – Top Read - 96 wells 1.0 pM or better, Bottom Read – 96 wells 2.0 pM or better.		
Luminescence Performance :		
a. Glow Luminescence mode		
b. Wavelength range: 300 – 850 nm or better		
c. Wavelength Selection: Monochromator.		
d. Dynamic range > 6 decades or better.		
e. Glow Sensitivity – (ATP Glow) - 96 wells 2 pM or better.		
• Special supplies: Dark plates for top optics reading in fluorescent mode (100 plates).		
• Company must provide a compliance statement supported by technical literature and website.		
• Authorisation certificate from the OEM must be included in the technical bid.		
• Unpacking and shifting of the instrument including manpower during installation must be in the vendor scope.		
• User list must be enclosed for the quoted model supplied to any other institute/Organization in Delhi and NCR.		
• Certificate for spare availability upto 10 years for quoted model to be provided from OEM along with the technical bid.		
• Min.3 Customer satisfactory / performance certificate for specific quoted model from the end user should be included in the quote.		
• Warranty 5 years including all spares , PM kit and calibrations of instrument on regular basis as and when required.		
• Include two multichannel (12 channels) pipettes (5-300ul)		

<ul style="list-style-type: none">• Consumables required during installation to setup the new instrument must be quoted along with the instrument.		
<ul style="list-style-type: none">• AMC & CMC Charges for the next 5 years after standard warranty must be quoted in optional item		