



No. IICT/PUR/0640/24-25/EQPT

Dt: 02-08-2024

Corrigendum- 1

**Sub: Revised/Amended Specifications against our Tender Enquiry No. IICT/PUR/0640/24-25/EQPT - reg.**

**Ref: CPPP Id No. 2024\_CSIR\_203448\_1 dt. 01-08-2024 for procurement of Microplate Multimode Reader**

Tendered Specifications for “Microplate Multimode Reader” stands amended/revised as per the following:

**Revised Technical specifications:**

- Microplate multimode reader with true Dual Double Monochromator for Absorbance, Fluorescence, Luminescence, TRF, and FRET without filter and suitable lamp source such as Xenon Flash Lamp with long life.
- The system should be capable of Endpoint Kinetics.
- System should be fully open for different reagent/kit manufacturers.
- Micro plate type: 6 to 384 well plates.
- Temperature control: 5 °C above ambient to 42 °C or better.
- Plate shaking: Linear, orbital and double orbital in 3 different speeds.
- System to have dedicated detector for each mode – Absorbance, Fluorescence and Luminescence.
- System to have Automated Z focus for optional signal integration in fluorescence reading.
- The system should perform wavelength scanning and dual color luminescence.
- The Fluorescence mode should have a spectral scan feature across Excitation and emission and TRF should be in primary mode.
- Low Volume quantification plate with 16 channel quartz optic tool with 2 ng/μL sensitivity (detection in both absorbance and fluorescence) should be supplied.
- All softwares provided at the time of installation should have free updates for 10 years that includes newer versions if any.
- Should be able to quantify 1-4 μL sample of nucleic acid and proteins.
- Computer attached to the multimode reader for data acquisition should be all-in-one 27-inch computer with intel core i7 14<sup>th</sup> gen or higher, 16 GB DDR5 RAM and 1TB SSD.
- Second computer for data analysis should be All-in-one 24-inch 4.5K Retina display with 8-core CPU, M3 chip, 10-core GPU, 512GB storage, 8GB unified memory, Two Thunderbolt / USB 4 ports, Two USB 3 ports, Gigabit Ethernet, Magic Keyboard with Touch ID.

**Absorbance:**

- Wavelength selection: Dual double Monochromator Optics.
- Wavelength range: 230 nm to 1000 nm or better with 1 nm increment.



- Lamp: Suitable Xenon Flash Lamp.
- Detectors: UV Silicon Photodiode.
- Measurement range: 0 – 4 OD.
- Plate shaking: Linear, orbital and double orbital in 3 different speeds.
- Upright Cuvette Port to read in vertical mode. The port should be compatible with cuvettes with volume ranging from 100  $\mu$ L to 2 mL.

#### Fluorescence:

- Reading capabilities for top and bottom of microplate
- Wavelength selection: Quad Monochromatic optics
- Wavelength range: Ex – 230-850 nm, Em – 280-850 nm or better
- Wavelength selection: 1.0 nm increments.
- Fluorescence Detector: PMT, UV and red-sensitive.
- Time Resolved Fluorescence through Monochromator (Primary mode) without filter cassette.
- FRET Assay without filter cassette must be performed at the time of installation.

#### Luminescence

- Detector: Photon counting system with low dark current PMT
- Wavelength range: 380 – 600 nm in primary mode
- Dynamic range: > 10<sup>6</sup> logs

#### Accessories

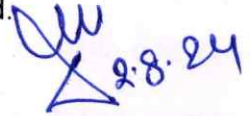
- Should provide two each of 100  $\mu$ L and 2 mL compatible quartz cuvettes
- Should provide battery run digital multipipette (repeat pipette) that can handle 1  $\mu$ L - 10000  $\mu$ L volumes

#### Three Years warranty on all supplies

#### Multimode Reader Certifications: Should be certified by CE, UL or CSA

All the bidders are requested to kindly take a note of above as originally tendered specifications get replaced by above and submit the quote accordingly.

All other terms & conditions of the tendered document remain unchanged.

  
2.8.24

(Dharmendra Kumar)  
Controller of Stores & Purchase