



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
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Ref No. (PR No. 1000039678)

(Rfx No.6100001730)

Technical specifications of Optical system for micro UTM with Image capturing software (Quantity: - 01)

Sr. No	Particular	Compliance Yes / No	Add. Information if any
01	<p><u>Technical Specifications of Optical system for micro UTM with Image capturing software</u></p> <ol style="list-style-type: none">1. Optical system2. Optics with 8:1 zoom3. Apochromatic greenough system is must4. Camera port with interface with fixed split 50 vis:50 doc right -integrated with optical system5. Magnification range 6.3X to 50X6. Switchable zoom click stops 0.63x-0.8x-1x-1.25x-1.6x-2x-2.5x-3.2x-4x-5x7. resolution 200 Lp/mm8. Working distance more than 85 mm9. object field of view 29 mm10. Interchangeable eyepieces PL10x/2311. Illumination systems12. Smart high-power LED Light Source with Double Pipe Fiber units with electronics Illuminance should more than 90000 lx13. LED Ring Light Illumination for shadow-less and homogeneous illumination with electronics14. Optical system Base for micro UTM15. Two plate mechanism Cast steel base with grinding from all sides and legs for height and surface level adjustment builtin level bottle16. Stage mounting single unit for two stages :-		

	<p>17. Micro UTM Size 22 x 88 x 90 stage mounting arrangements With stage centering facility Quick clamping mechanism sample positioning arrangement +/- 300 micron</p> <p>18. Micro Utm size 36x108x147 stage mounting arrangements with stage centering facility Quick clamping mechanism sample positioning arrangement +/- 500 micron</p> <p>19. Camera adapter</p> <p>20. High resolution c-mount camera adapter 0.5X for optical system</p> <p>21. High resolution Scientific Camera system with capture frequency selectable</p> <p>22. 5.0 MPixel 1/2.5" CMOS Camera for Microscope</p> <p>23. Sensor CMOS</p> <p>24. Resolution 2592 x 1944</p> <p>25. Mpixels 5.0</p> <p>26. Max.frame rate [Hz] 5.8</p> <p>27. Shutter type Rolling / Global Resel</p> <p>28. Sensor size 1/2.5"</p> <p>29. Pixel size [μm] 2.2 / 2.2</p> <p>30. Exposure time 10 μs – 1 s</p> <p>31. ADC resolution / Output 20 bit → 10 / 8 bit</p> <p>32. SNR > 38 dB</p> <p>33. DR [normal / HDR] > 70 dB /</p> <p>34. Trigger [HW / SW] Yes / Yes</p> <p>35. Pipelined in continuous / Yes / No [Reset only]</p> <p>36. Triggered more</p> <p>37. Software</p> <p>38. Software design for automatic capturing of images with selected frequency and automatic generate database time vs images and automatic images save with time as name of image</p> <p>Warranty: - 12 months.</p>		
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