



جامعة السلطان قابوس  
Sultan Qaboos University

## Requisition Form

Requisition Number: 7038/26/0071

Last Date for Submission: 22/06/2026

S.N.	SQU Product Code	Description	Qty	UOM	Remarks																										
1	EQUELETRA0001	TRANSFORMER	1	Nos	<p>Fourier Transform Infrared Spectrometer (FTIR)</p> <p>General Description FTIR is an advanced analytical instrument used for qualitative and quantitative chemical characterization of materials through infrared absorption spectroscopy. It is suitable for polymers, composites, nanocomposites, biomaterials, pharmaceuticals, coatings, fibers, liquids, powders, and organic/inorganic compounds. It provides high-resolution spectral analysis with rapid scanning capability and integrated software for data acquisition and interpretation. More details are in this link:</p> <p><a href="https://docs.google.com/document/d/1UqtgBqSut2Oa6qgG7h9ImzKsZtcmo2yr/edit?usp=sharing&amp;oid=110302868485855904870&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1UqtgBqSut2Oa6qgG7h9ImzKsZtcmo2yr/edit?usp=sharing&amp;oid=110302868485855904870&amp;rtpof=true&amp;sd=true</a></p> <p>Technical Specifications</p> <table><thead><tr><th>Parameter</th><th>Specification</th></tr></thead><tbody><tr><td>Spectral Range</td><td>4000–400 cm<sup>1</sup> minimum</td></tr><tr><td>Spectral Resolution</td><td>Better than 1 cm<sup>1</sup></td></tr><tr><td>Wavenumber Accuracy</td><td>±0.01 cm<sup>1</sup></td></tr><tr><td>Signal-to-Noise Ratio</td><td>30,000:1</td></tr><tr><td>Detector Type</td><td>DTGS detector minimum</td></tr><tr><td>Beam Splitter</td><td>KBr coated germanium</td></tr><tr><td>Source</td><td>Long-life ceramic IR source</td></tr><tr><td>Scan Speed</td><td>User selectable</td></tr><tr><td>Interferometer</td><td>Permanently aligned Michelson interferometer</td></tr><tr><td>Optical System</td><td>Sealed and desiccated</td></tr><tr><td>Data Collection Modes</td><td>Transmission, ATR, Reflectance</td></tr><tr><td>Software Compatibility</td><td>Windows-based operation</td></tr></tbody></table>	Parameter	Specification	Spectral Range	4000–400 cm <sup>1</sup> minimum	Spectral Resolution	Better than 1 cm <sup>1</sup>	Wavenumber Accuracy	±0.01 cm <sup>1</sup>	Signal-to-Noise Ratio	30,000:1	Detector Type	DTGS detector minimum	Beam Splitter	KBr coated germanium	Source	Long-life ceramic IR source	Scan Speed	User selectable	Interferometer	Permanently aligned Michelson interferometer	Optical System	Sealed and desiccated	Data Collection Modes	Transmission, ATR, Reflectance	Software Compatibility	Windows-based operation
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					Sampling Modes                      Solid, liquid, powder, film Electrical Requirements Parameter                      Specification Voltage 220–240 V Frequency                      50/60 Hz