

Laboratory and Measuring and Observing and Testing Equipment, UNSPSC CODE:- 41						
Measuring and observing and testing instruments, UNSPSC CODE:- 4111						
Viewing and observing instruments and accessories, UNSPSC CODE:- 4111711						
Scanning Probe Microscopes, UNSPSC CODE:- 4111711						
S. No	Parameter	Field type	Field Category	LOV		Unit/Remark
APPLICATION						
1	Working Principle	Enumerable	Mandatory	Scanning Tunneling Microscopy		
2	Application	Enumerable	Golden	Topography/Atomic Structure,Magnetic/Electric fields,Surface temperatures		Multi Select
PERFORMANCE						
3	Max Scan area (micrometer x micrometer)	Enumerable	Mandatory	5 micrometer x 5 micrometer		
4	X/Y resolution	Enumerable	Mandatory	6 picometers		picometer
5	Z resolution	Enumerable	Mandatory	10 picometer		picometer
6	With Lock-In Amplifier for Spectroscopy	Enumerable	Mandatory	Yes		
7	Lock-in Amplifier frequency range	Enumerable	Golden	10 Hz to 1 Mhz		
8	Scan modes	Enumerable	Golden	Constant Current Topography, Constant Height Topography		Multi Select
9	Scan modes with Lock-In Amplifier (LIA)	Enumerable	Golden	Local Density of states imaging, Local barrier height imaging		Multi Select
10	Spectroscopy Modes	Enumerable	Mandatory	I-V, dI/dV (Numerical and with LIA), I-Z, I-time		
11	Scan Speed	Enumerable	Mandatory	51 ms/line		
12	Z range	Enumerable	Mandatory	400 nanometers		
13	Current Range	Enumerable	Mandatory	"±/ 10 NanoAmpere	"±/ 100 NanoAmpere	
14	Current Resolution	Enumerable	Mandatory	5 picoAmpere	50 picoAmpere	
15	Bias Range	Enumerable	Golden	+/- 10 Volt	+/- 100 Volt	
16	Bias Resolution	Enumerable	Mandatory / Filter	0.3 millivolt	3 millivolt	Millivolt
FEATURES						
1	Software Features (Select Applicable Features only)	Enumerable	Golden	Length and Angle extraction, X/Y/Z calibration, Slope and Z-drift Correction, In-built software CRO plotting imaging signal during scans, Graphical assistant for localized zooming, Spatial and Fourier Low-Pass Filtering, Background Subtraction, Histogram Equalization, Zooming, Contrast, Slope Correction, Line Profile Extraction, X/Y Slope Correction, Fourier Transforms and Filters, Selective Zooming, Calibration, 3D-rendering of STM images, 2D-rendering of STM images, Dual Mode (Scan and Retrace) Image Display, customizable look-up tables for pseudo image coloring		Multi Select
	Export Data Format	Enumerable	Golden	ASCII, JPG, PNG, Postcript		Multi Select
2	Generic Features (Describe or Provide Catalogue Link) (100 Ch.)	Text	Mandatory			AKBNV

3	Salient Features (Describe or Provide Catalogue Link) (100 Ch.)	Text	Mandatory						AKBNV
GENERIC									
1	Overall Dimensions (mm x mm x mm)	Text	Mandatory						AKBNV
2	Weight	Text	Mandatory						AKBNV
3	Power Supply	Enumerable	Mandatory					230 V ± 10, 50 Hz	
4	Connectivity / Computer Interface	Enumerable	Mandatory					USB, WIRELESS, WIFI, ETHERNET, Blue tooth, RS 232	Multi Select
ACESSORIES									
1	All Essensials for Satisfactory Functioning of the SPM (100 Ch.)	Text	Mandatory					Yes	Multi Select
ENVIRONMENTAL									
1	Minimum Operating Temperature	Enumerable	Golden					0, 5, 10, 20	Degree Celsius
2	Maximum Operating Temperature	Enumerable	Golden					30, 40, 45, 50, 55, 60	Degree Celsius
3	Operating Humidity (Rh) (%) at 40 degree C	Enumerable	Golden					70, 75, 80, 85, 90, 95	%
WARRANTY / TRAINING									
1	Warranty on equipment	Enumerable	Golden	1	2	3			Year
2	Onsite Training	Enumerable	Golden					3, 5, 7, 10, 15	Days
CERTIFICATION									
1	Certification	Enumerable	Mandatory / Filter					ISO, GLP, GMP, CE, HOPG, NA	
2	Availability of Test Reports from Central Govt / NABL approved / ILAC accredited Lab to prove conformity to the Specification	Enumerable	Mandatory / Filter	Yes	No				
3	If Yes, Test Report to be furnished to the Buyer on demand	Enumerable	Golden	Yes	NA				
4	Test Report No. and Date (hint:- May indicate 'NA' if Test Report is not available)	Enumerable	-						AKBNV
5	Name of the Lab and Address (hint:- May indicate 'NA' if Test Report is not available)	Enumerable	-						AKBNV

AKBNV: Allow Key But Not Value

JITENDER-TA

**Modifier
AD-GRKP**

**Moderator
DCEO-SKJ**