

Laboratory and Measuring and Observing and Testing Equipment ; 41											GeM 3.0	
Measuring and observing and testing instruments ; 4111												
Land surveying instruments ; 411142												
Electronic Theodolite ; 41114204												
S. No.	Parameter	Field Type	Field Category	LOV							Unit	Remarks
<b>TELESCOPE</b>												
1	Image Type	Enumerable	Mandatory	Erect								
2	Objective Lens Aperture	Measurable	Golden	40	45	50					mm	
3	Magnification (in X)	Numeric	Golden	25	30	35	40	45	50		Higher is Better	
4	Telescope Resolving power (Angle)	Measurable	Golden	2.5	3	3.5	4	4.5			seconds	Lower is Better
5	Telescope Field of View	Enumerable	Golden	1°10'	1°20'	1°30'	1°40'	1°50'	2°			
6	Minimum Focus distance	Measurable	Golden	0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8						meter	Lower is Better	
7	Stadia Ratio (Stadia Multiplication Constant)	Enumerable	Mandatory	100								
8	Stadia Constant (Stadia Addition Constant)	Enumerable	Mandatory	0								
9	Reticle illumination	Boolean	Golden	Yes	No						Yes is Better	
<b>ANGULAR MEASUREMENT</b>												
10	Method of Angular Measurement	Enumerable	Golden	Absolute		Incremental						
11	Units of Angular Measurement, other than degree (hint: Measurement in Degree is Must)	Enumerable	Mandatory / Filter	Gon (gradian)		Mil (milli radians)		V % (Slope)			Multiple Select	
12	Resolution (Least Count) of Angular Measurement	Measurable	Golden	0.05, 0.1, 0.2, 0.25, 0.5, 1, 2, 2.5, 5, 7.5, 10, 20						seconds	Multiple Select	
13	Accuracy of Angular Measurement (±)	Measurable	Golden	0.1, 0.2, 0.5, 1, 1.5, 2, 3, 4, 5, 10, 20						seconds	Lower is Better	
14	Angular Measurement detection method - Horizontal	Enumerable	Golden	Single Side		Dual Sides						
15	Angular Measurement detection method - Vertical	Enumerable	Golden	Single Side		Dual Sides						
<b>COMPENSATION</b>												
16	Compensation	Enumerable	Mandatory / Filter	Automatic	Dual Axis	Triple Axis		Quadruple Axis				
17	Compensation Range (±)	Measurable	Golden	Range : >= 3						minutes	Higher is Better	
18	Compensator Setting Accuracy	Measurable	Golden	0.5	1	1.5	2				seconds	Lower is Better

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<b>LASER POINTER</b>												
19	Laser Pointer	Boolean	Golden	Yes	No							Yes is Better
20	Method of focusing	Enumerable	Mandatory / Filter	Coaxial Focusing		NA						
21	Laser Range in Daylight	Enumerable	Golden	25	50	75	100	125	150	NA	mtr	Higher is Better
22	Laser Class	Enumerable	Golden	Class 2	Class 3 A	Class 3 R	NA					
<b>PLUMMET</b>												
23	Type of Plummet	Enumerable	Golden	Optical	Laser							
24	Imaging	Enumerable	Mandatory	Erect								
25	Accuracy of Plummet (±)	Measurable	Golden	0.5	1	1.5	2				mm	Lower is Better
26	Magnification (Optical Plummet)	Enumerable	Golden	2X	3X	4X	5X	6X	8X	NA		
27	Field of View (Optical Plummet) (degrees)	Enumerable	Golden	4°	5°	6°	NA					
28	Minimum Focus (Optical Plummet)	Enumerable	Mandatory / Filter	0.5 mtr	NA							
29	Class of Laser (Laser Plummet)	Enumerable	Golden	Class 2	Class 3 A	Class 3 R	NA					
<b>LEVEL VIAL / BUBBLE SENSITIVITY</b>												
30	Circular Vial (per 2 mm)	Measurable	Golden	6	8	10					minutes	
31	Plate / Tubular Vial (per 2 mm)	Measurable	Golden	20	30	40	50	60			seconds	
<b>DISPLAY / INTERFACE / STORAGE</b>												
32	Display Layout	Enumerable	Golden	On One Side		On Two Side						
33	Type of Display	Enumerable	Mandatory / Filter	LCD	Backlit LCD							
34	Display Features	Boolean	Mandatory / Filter	Colour display, Monochrome display, Graphic Display, Touch Screen Display								Multiple Select
35	Display Size	Measurable	Mandatory									inch
36	Number of Display lines	Enumerable	Golden	1 line	2 line	3 line	4 line					
37	Data Output	Enumerable	Mandatory / Filter	USB Cable	SD Card	RS 232 Port	Ethernet	WiFi	Bluetooth			Multiple Select
38	Measurement Entry Storage Capability (Data Sets)	Numeric	Golden	500, 1000, 2000, 5000, 10000, 20000, 30000, 40000, 50000								Higher is Better

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<b>ACCESSORIES</b>												
39	Data Transfer Cable	Enumerable	Mandatory	Yes								
40	Instruction Manual	Enumerable	Mandatory	Yes								
41	Tripod	Enumerable	Golden	With	Without							
42	Type of Tripod	Enumerable	Golden	Wooden	Plastic	Metallic	NA					
43	Number of Tripods inclusive in the scope of supply	Numeric	Golden	0	1	2						
44	Lens Cover Set	Enumerable	Mandatory	Yes								
45	Shock Absorbing Carrying Case with Shoulder Strap	Enumerable	Mandatory	Yes								
<b>GENERIC</b>												
46	Ingress Protection	Ordinal	Golden	IP 54, IP 55, IP 56, IP 64, IP 65, IP 66								
47	Tribrach Type	Enumerable	Golden	Fixed	Detachable							
48	Weight	Measurable	Mandatory							Kg		
49	Dimensions (Size of Theodolite) (in mm X mm X mm)	Text	Mandatory									
50	Additional Features, If Any	Text	-									
51	List of Items and Quantity of each Item Included in the Offer	Text	-									
<b>BATTERY</b>												
52	Power Source	Enumerable	Mandatory	Rechargeable Batteries			Alkaline Batteries (Non-Rechargeable)				Multiple Select	
53	Battery Size, if Non Rechargeable Battery	Enumerable	Mandatory / Filter	AA	AAA	Type-C	9 - V Rectangular Battery		NA			
54	Battery Chemistry, if Rechargeable Battery	Enumerable	Mandatory / Filter	Li-Ion	Ni-MH	SMF	NA					
55	Number of Batteries required for operation	Numeric	Mandatory / Filter	1	2	3	4	5			Higher is Better	
56	Number of Batteries inclusive in the scope of supply	Numeric	Golden	0, 1, 2, 3, 4, 5, 6, 8, 10								Higher is Better
57	Operating Voltage	Measurable	Mandatory	Range : 3 to 24						Volt		
58	Battery Operating (Back Up) Time	Measurable	Golden	4, 5, 6, 8, 10, 12, 16, 20, 24, 30, 36, 48, 60, 90, 120, 150, 180						hours	Higher is Better	
59	Battery Charger inclusive in the scope of supply (May indicate 'NA' if Not Applicable)	Enumerable	Mandatory	Yes	NA							

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<b>OPERATING CONDITIONS</b>												
60	Minimum Operating Temperature	Measurable	Golden	0	-5	-10	-15	-20	-25	-30	deg. C	Lower is Better
61	Maximum Operating Temperature	Measurable	Golden	50	55	60	65	70			deg. C	Higher is Better
62	Non Condensing Humidity, Rh @ 40 °C	Measurable	Golden	65	70	75	80	85	90	95	%	Higher is Better
<b>WARRANTY</b>												
63	Warranty	Measurable	Golden	1, 2, 3, 4, 5							Year	Higher is Better
<b>CERTIFICATIONS</b>												
64	Availability of Test Reports from Central Govt / NABL approved / ILAC accredited Lab to prove conformity to the specification	Boolean	GOLDEN	Yes	No							
65	If Yes, Test Report to be furnished to the Buyer on demand	Enumerable	Mandatory / Filter	Yes	NA							
66	Test Report No. and Date (May indicate 'NA' if not applicable)	Text	---									
67	Name of the Lab and Address (May indicate 'NA' if not applicable)	Text	---									

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