

DEL/DQA/EL/GeM/TP/Total Solution/2017/84

Major Product Category - : 'Measuring & observing & testing instruments UNSPSC: 4111

Sub category - Land surveying instruments : UNSPSC Code:411142

Item - : Electronic Total Station UNSPSC Code: 41114207 ITCHS:90152000

draft

S.No	Parameters		Value 1	Value2	Validation Rule	Whether Filter required	Priority	Unit	Demand aggregation
1	Total station is a surveying equipment combination of Electromagnetic Distance Measuring Instrument and electronic theodolite. It is also integrated with microprocessor, electronic data collector and storage system. The instrument can be used to measure horizontal and vertical angles as well as sloping distance of object to the instrument.	CH	yes						
2	State of the art glass encoder	CH	yes						
3	Horizontal and Vertical readout Time	N					must declare	second	
4	Precision dual LCD panels with large, easy-to-read numbers	CH							
5	Vertical Tilt Sensor monitors the tilt angle in x-axis	CH	yes						
6	Vertical angle measuring; provides three different options plus percentage of grade	CH	yes						
7	Auto Power-Off Option: if unit is not moved it will shut off in- 20 minutes, 30 minutes or infinity	CH	yes						
8	Optical plummet	CH	yes						
9	Zero resetting	CH	yes						
10	Dust & Water resistant, sealed construction	CH	yes						
11	Removable tribrach for multiple set-ups	CH	compliance to IP:66	compliance to IP:55		yes	1		
12	Angle Measurement Accuracy	CH	yes						
13	Method	CH	1" (0.3 mgon)	3" (1 mgon)		yes	2		
14	Display resolution	CH	Absolute, continuous, diametrical						
15	Compensation	CH	0.1" / 0.1 mgon						
		CH	Quadruple Axis compensation at all models						

16	Compensator Setting Accuracy	CH	0.5"	1"		yes	3	
17	Distance Measurement with Reflector- Range Round prism	N	3.5					
18	Range Reflective tape (60 mm x 60 mm)	N	250					Meter
19	Distance Measurement with Reflector-Accuracy	CH	Standard: 1.0 mm + 1.5 ppm Fast: 2.0 mm + 1.5 ppm Tracking: 3.0 mm + 1.5 ppm					Meter
20	Typical Measurement time	CH	1 sec or less					
21	Distance Measurement without Reflector- Range PinPoint R500 / R1000	CH	> 500 m / > 1000 m					
22	Distance Measurement without Reflector-Accuracy	CH	2 mm + 2 ppm					
23	Distance Measurement without Reflector- Laser dot size	CH	At 30 m: approx. 7 x 10 mm At 50 m: approx. 8 x 20 mm					
24	Data storage- Internal Memory	CH	1 GB					
25	USB memory stick	CH	8 GB to 32 GB					
26	SD Card	CH	8 GB supportable/ max supportable					
27	Interfaces	CH	- Serial (Baudrate up to 115'200) - USB Type A and mini B, - Bluetooth® Wireless, class 1 - Bluetooth® > 1000 m (with TCPS29)					
28	Data formats	CH	Custom ASCII, DXF, LandXML, FBK, RW5, RAW					
29	Guide Light (EGL)- Working Range (average atmospheric conditions)	CH	5 m – 150 m					
30	Guide Light (EGL)- Positioning accuracy	CH	5 cm at 100 m					
31	Telescope- Magnification	CH	30 x					
32	Telescope- Resolving power	CH	3"					
33	Telescope - Field of View	CH	1° 30' (1.66 gon)					
34	Telescope - Focusing range	CH	2.7 m at 100 m					
35	Telescope- Reticle	CH	1.7 m to infinity					
36	Keyboard and Display	CH	Illuminated, 10 brightness levels					
37	Operating System	CH	Dual front and back color touch screen and full keyboard					
38	Laserplummet-Type	CH	Windows CE -ver 6.0					
39	Laserplummet-Centering accuracy	CH	Laser point, 5 brightness levels					
40	Internal Battery Type	CH	1.5 mm at 1.5 m Instrument height					
41	Battery Operating time	CH	Li-ion rechargeable battery External Battery Option					
42	Weight in Kg	CH	16	20		yes	4	Hrs
43	Environmental Factors Temperature range (operation)	CH	Light Weight- 5Kg to 6Kg -5°C to +50°C					Kg

44	Onboard Software Functions	CH	Survey & Coding with Lineworks, Stakeout, DTM Stakeout Station Setup, Surface & Volumes, Remote Height, Hidden Point Offset, Reference Line / Arc, Cogo, Traverse, Sets of Angles Determine Coordinate Systems,						
45	The Electronic Theodolite Includes: Hard-shell carrying case, manual, batteries and accessories: tool kit, drying cloth, and plumb bob.	ch	yes						
46	Type approval and callibration from NABL/ILAC/Govt. Laboratory		yes						
47	Type Test Certificate No.								
48	Type Test Certificate date	CH							
49	Name of Lab	CH					*		
50	Address of Lab	CH					*		
51	warranty	CH					*		
52	AMC	CH					*		
		CH		3		5			
		CH		5					
	* must declare								years Years
			Creater						
								Moderator	Approver