

Specifications for 3D Laser Scanner and Software

		Laser Scanner
1.	Measurement Speed	Min. 5,00,000 points/Sec. measurement speed or better
2.	Max. Measurement Range	Not less than 250m
3.	Min. Measurement Range	Min. 1 meter measurement range or better
4.	Accuracy	Min. 5 mm Ranging Accuracy or better
5.	Horizontal Scanning Angle/Field of View	360° Horizontal Scan Angle
6.	Vertical Scanning Angle/Field of View	Min. 100° Vertical Scan Angle or Better
7.	Laser Class	Laser Class should be 1
8.	Temperature Range Operation	+2 °C to +45 °C Temperature Range or Better
9.	Power Source	The Instrument Should come with rechargeable battery for minimum 4 Hours of field operation or better
10.	Data Storage	Min. 128GB Internal/External Data Storage or better
11.	Display	Touch screen display for operation
12.	Weight	Max. 15Kg or less
13.	Onboard Features	Inbuilt GPS/GNSS/ Geo-referencing, Photo Capturing, capable for leveling of each scan, Automatic and Manual site Registration.
14.	Data Transfer	WLAN/ SD card/USB Drive/Wi Fi or better
15.	Software	<p>a. Workflow: Software system must be able to do automatic registration for target, colorization of scans/control color mapping, geo-referencing and generation of colored point cloud.</p> <p>b. Software system must be able to generate 2D plans.</p> <p>c. Software system must provide 3D modeling tools for creation of 3D geometry of scanned object.</p> <p>d. Software system must be capable to filter/remove unwanted objects viz people, buildings, vehicles, trees, noise etc. or Automatic cloud clean up feature.</p> <p>e. Software system must provide 2D and 3D viewing capabilities.</p> <p>f. Software system must provide virtual reality view or Panoramic view.</p> <p>g. Data formats should be imported and exported in .pts, .ptx, .dxf, .e57 or better.</p> <p>h. Image and model data should be imported and exported in .bmp, .tif, .jpg or better.</p>
16.	Accessories	<p>Rechargeable battery -2 no.</p> <p>Battery charger -2 no.</p> <p>Scanner carrying case -1 no.</p> <p>Tripod for mounting Scanner – 1 no.</p> <p>Processing Software License -1 no.</p> <p>Hard disk/SD card/Pen drive -1 no.</p>
17.	Standard Warranty	1 year against any manufacturing defect.
18.	AMC Contract	3 years after expiry of standard 1st year warranty