

SPECIFICATIONS OF AUTOCOLLIMATING THEODOLITE

1.	Description	Motorized Industrial Theodolite with pan focal telescope and built-in auto collimation eyepiece
2.	Features	Industrial Tribrach with Laser Plummet, Built-in Auto-collimation device, Built-in Internal target for collimation measurements, Optical sight in both faces industrial reticule, Servo motor controlled drives for Hz and V settings, Industrial Keyboard and large illuminated display on both the faces, Compartment for internal battery and Flash card & Port for power, Communication and Data Transfer.
3.	Accuracy	Angular Accuracy: ≤ 0.5 arc sec.
4.	Display Least count	0.01 arc sec
5.	Instrument Weight including Tribrach and Internal battery	≤ 10 kg. (Approx)
6.	Instrument Dimension (L x B x H) in mm	250 x 250 x 350 (Approx)
7.	Focusing Distance	(a) Shortest focusing distance: from telescope front lens: ≤ 0.6 m, (b) Longest Focusing Distance: Infinity
8.	Eyepiece Magnification	(a) $\geq 15X$ at focusing distance of < 0.8 m (b) $\geq 40X$ at focusing distance of 10 m (c) $\geq 50X$ at focusing infinity distance
9.	Reticule	Industrial reticule with concentric circles
10.	Motorized drive	Motorized Horizontal and Vertical Self Locking endless drives for changing face.
11.	Manual drive	Drives for manual operations.
12.	Peep sight	Double sided peep sight to measure a point in clockwise & counter clockwise direction.
13.	Telescope	(a) Type: Pan focal (b) Image: Erect (c) Objective aperture: ≥ 50 mm, (d) Clear Objective diameter: ≥ 40 mm, (e) Focusing: Coarse and Fine Telescope Tilt: (a) Pointing direction down from horizontal: ≥ -55 deg (b) Pointing direction up from horizontal: $\geq +47$ deg
14.	Laser Plummet	(a) Type: Visible red laser class 2 (b) Location: In standing axis of instrument

15.	Level	(a) Compensation: Centralized quadruple axis compensation, (b) Circular level sensitivity: ≥ 5 arc minute / 2mm (c) Electronic Level resolution: ≤ 2 arc sec.
16.	Power	Power adaptor to be supplied for 230 V, 50 Hz AC supply
17.	Environmental	(a) Operating Temperature: 0°C to +45°C (b) Storage Temperature: 0°C to +50°C (c) Protection against water, dust and sand: IP54 (d) Humidity: Max 95% non-condensing.
18.	Internal battery	Suitable Li-Ion, Plug-in type, Rechargeable (1 no)
19.	Battery Charger	Battery Charger to charge internal battery
20.	Illuminating source	plug in lamp
21.	General	(a) Vendors with authorized dealership only need to quote. Authorization letter from OEM to be provided along with the quotation. (b) Product should carry suitable guaranty/ warranty for a minimum of 2 years. (c) Calibration Certificate of the equipment should be sent along with the equipment from the facility traceable to international standard. (d) Instruments to be supplied with upright portable container.
22.	Delivery & Demonstration	Delivery of the system & demonstration of all functions shall be done by Vendor at LEOS.
23.	List of Deliverables	(a) Motorized industrial Theodolite with pan focal telescope and build in auto collimation eyepiece including both faces color display Keyboard with touch screen, Industrial tribrach with optical plummet, Plug in lamp, Internal Batteries (Li-ion Batteries) user manual, upright container and calibration certificate. (QTY. - 6 Nos) (b) Battery Charger (QTY. - 6 Nos)
		List of Essential Spares
		(a) Industrial tribrach with optical plummet (QTY. - 9 Nos) (b) Internal Batteries (Li-ion Batteries) (QTY. - 12 Nos) (c) Plug in lamp (QTY. - 6 Nos) (d) Eyepiece (QTY. - 6 Nos) (e) Power Cable (QTY. - 12 Nos)
24.	Delivery Period	The vendor has to supply all the deliverables to LEOS within 6 months from the date of release of purchase order.
25.	Quotation	(a) Quotation to be submitted in 2 part. (b) Part A: It contains only technical compliance. Commercial details should not be disclosed even in response to any technical clarifications sought subsequently against the technical offer submitted. Disclosing of any commercial details in technical quote will disqualify the offer. (c) Part B: It contains commercial details. (d) Compliance should be provided with respect to all the specifications with values, supported with the relevant documents.

SKETCH OF AUTOCOLLIMATING THEODOLITE

