

Type	Infra-red / Reflectorless
Laser class	Visible Laser: Class III a (3R) (Reflectorless)/ Class II (2) (Prism, Retro-target)
Conformity	IEC 60852-1:2001/ EN 60825-1: 1994 +A11 : 1996 (CE - Test Standard: EN 61000-6-1: 2007 & EN 61000-6-1: 2003 as shown in the Test Report Number: SHEMO09080087001)
Telescope	Fully Transiting, Coaxial sighting and Distance measuring optics. Image: Erect. Magnification 30x. Objective aperture: 45mm (EDM:50mm). Resolving power: 3". Field of view: 1° 30'. Minimum focus: 1.2m, Reticle glass: ∞ mark printed. Reticle illumination: 5 brightness levels
Angle Measurement	Photoelectrical absolute encoder scanning. Both circles adopt diametrical detection
Display resolution	1"/5" selectable
Angle Accuracy (ISO 17123-3)	2"
Distance measurement	Modulated laser type: 0.670μm, Basic Frequency: 60MHz, Coaxial EDM, Laser spot: 7 x 14mm/ 20m
Unit of Measurement	Meters/ Feet Selectable
Measurement range using:	
a. Single Prism	4500m
b. Triple Prism	6000m
c. Mini prism (25.4mm)	1500m
d. HORIZON retro target	1200m
e. Reflectorless (Long range)	900m
f. Reflectorless (Standard range)	600m
g. Display resolution	1mm
Distance Measuring Accuracy	
a. Fine mode with prism	2mm + 2ppm x D
b. Track mode with prism	3mm + 2ppm x D
c. Reflectorless mode (LR/SR)	3mm + 2ppm x D/ 5mm + 2ppm x D
Measuring time	
a. Fine mode with prism	0.8s
b. Track mode with prism	0.3s
c. Reflectorless mode	1.5s
Vial Sensitivity	Plate vial: 30"/2mm, Circular Vial 8"/2mm
Compensator	
System	Liquid Electric Detection type with 3' correction range
Type	Dual Axis Compensator
Graphical Plan display	LCD graphical survey plan display system of measurements, points lines and polygons. Zoom in, Zoom out, Panning features
General	
Display and keypad	Alphanumeric/Dot Matrix LCD/ Full screen illumination using white backlight/ 28 keys/ dual keypads
Data storage and transfer	SD card, RS232 and USB selectable. 30,000-40,000 internal memory .100 000 points using SD card
On board software programs	REM, MLM, Area 2D/3D, Point to Line, Layout, Resection, Offsets, Z Coordinates, Volume calculation, Road Design, COGO(Travers e, Line, Arc, Point Intersection, Inverse), Lead Traverse (Calculation, Adjustment and Balancing)
Laser Pointer	Yes
Tribrach type	Premium construction, dust and water proof, 3-pin forced groove detachable
Plummet type	Selectable between Optical plummet: Erect image 3x magnification, focusing range: 0.3m to ∞, Field view 5° OR Laser plummet (Class II laser)
Battery and charger	Compact Ni-H battery, 6V DC, Operation duration 15hrs (continuous), 16hrs (dormancy), quick battery charger with power cord, optional external battery (24hrs continuous operation time)
Operating temperature range	-20°C to +55°C
Sensors and Corrections	Auto sensing and correction. Refraction and Earth curvature correction: Selectable K=0.14/0.02
Physical dimensions	200 x 180 x 350mm, 5.8kg weight
Standard accessories	Carrying case, rain cover, Transfer cables (USB and RS232c), plumb bob, extra battery, charger with power cord, 1GB SD card, Manual, target board, HLink data transfer software
Waterproofing standard	IP66