

Survey Equipments





Surveying Equipments

Auto Level (Topcon) SL-SE-001

The Topcon AT-B series sets a new standard for auto levels used in surveying, engineering and construction applications. The AT-B4 automatic level features further enhanced reliability under all environmental conditions. With the IPX6 rating, the instrument is protected against powerful water jets from all directions, making it fully resistant to driving rain and splashing water. The Topcon AT-B4 quickly levels and stabilizes the line of sight with its finely tuned magnetic damping system, in spite of any fine vibrations present when working near heavy equipment or busy highways.

Features: 24X magnification, WATERPROOF to IPX6 rating, short focus (1.6 ft. min.) magnetic damping, 360-Degree Horizontal Circle, Sighting Guide, 1:100 Stadia, Approximate Range 250 feet, 5 Year Manufacturers Warranty.

Package includes: Auto Level, Hard-Shell Carry Case, Plumb Bob, Weather Protective Bag, Lens cleaning cloth, Allen Wrench, and Operators Manual.

Topcon AT-B Series Features:

- Durable, Dependable, High Value Auto Levels
- 5 Models - 32x, 28x, and 24x Magnifications
- Rapid, Accurate, and Stable Automatic Compensation
- Ultra-Short 20cm (7.9 in.) Focusing
- All-Weather Dependability
- Clampless, Endless Fine Horizontal Adjustments

Rapid, Stable, and Durable Compensator

The compensator of AT-B Series incorporates four suspension wires made of super-high-tensile metal that features minimal thermal expansion coefficient, providing unmatched durability and accuracy. Finely tuned magnetic damping system quickly levels and stabilizes the line of sight despite the fine vibrations present when working near heavy equipment or busy roadways.

Horizontal Circle for Angle Measurement

Horizontal angles can be directly read in 1° or 1 gon units. Free rotation feature allows you to read any angle from zero. The circle is covered for protection against dirt and scratch. The reading window is located below the eyepiece for quick reading.

20cm (7.9 in.) - Ultra-Short Minimum Focus

The AT-B Series can focus on objects at 20cm (7.9 in.) in front of the telescope. This feature dramatically facilitates the works in confined spaces.



SL-SE-001

Topcon Auto Level AT-B Series Technical Specifications:

Technical Specifications			
TELESCOPE	AT-B2	AT-B3	AT-B4
Length	215mm (8.46 in.)	215mm (8.46 in.)	215mm (8.46 in.)
Magnification	32X	28X	24X
Objective Aperture	42mm (1.65 in.)	36mm (1.42 in.)	32mm (1.26 in.)
Resolving Power	3 in.	3.5 in.	4 in.
Field of View	1°20'	1°25'	1°25' (at 100m/328ft.)
(at 100m/328ft.)	(2.3m/7.5 ft.)	(2.5m/8.2 ft.)	(2.5m/8.2 ft.)
Min. Focus from end of telescope	0.2m (7.9 in.)	0.2m (7.9 in.)	0.2m (7.9 in.)
Min. Focus from instrument center	0.3m (1 ft.)	0.3m (1 ft.)	0.3m (1 ft.)
Image	Erect	Erect	Erect
Stadia Constant	0	0	0
Stadia Ratio	100	100	100
Focusing Knob	2-speed	1-speed	1-speed
Sighting Aid	Peep Sight	Gun Sight	Gun Sight
ACCURACY	AT-B2	AT-B3	AT-B4
Without Micrometer	0.7mm (0.03 in.)	1.5mm (0.06 in.)	2.0mm (0.08 in.)
With Micrometer	0.5mm (0.02 in.)	n/a	n/a

Surveying Equipments



COMPENSATOR	AT-B2	AT-B3	AT-B4
Type	Pendulum compensator with magnetic damping system		
Setting Accuracy	0.3 in.	0.5 in.	0.5 in.
Working Range	±15 ft.	±15 ft.	±15 ft.
CIRCULAR LEVEL	AT-B2	AT-B3	AT-B4
Sensitivity	10 ft./2mm	10 ft./2mm	10 ft./2mm
HORIZONTAL CIRCLE	AT-B2	AT-B3	AT-B4
Diameter	107mm (4.1 in.)	107mm (4.1 in.)	107mm (4.1 in.)
Minimum Division	1"/1gm	1"/1gm	1"/1gm
GENERAL	AT-B2	AT-B3	AT-B4
Water Resistance	IPX6 (IEC 60529:2001)		
Operating Temperature	-4°F to +122°F (-20°C to +50°C)		
Width	5.12 in. (130mm)	5.12 in. (130mm)	5.12 in. (130mm)
Length	8.46 in. (215mm)	8.46 in. (215mm)	8.46 in. (215mm)
Height	5.51 in. (140mm)	5.51 in. (140mm)	5.31 in. (135mm)
Weight	4.1 lbs. (1.85kg)	3.7 lbs. (1.7kg)	3.7 lbs. (1.7kg)

Auto Level (Sokkia) SL-SE-002



SL-SE-002

Sokkia's B series automatic levels feature enhanced reliability under all environmental conditions and are more tightly sealed against water, dust and humidity (IPx6). Quick setup, easy sighting and superior durability against vibration and shock ensure increased productivity. The B series Sokkia Auto levels incorporate the most precise and reliable compensator available in the market today. The optimally designed telescope provides exceptionally bright and sharp view that reduces operator's eye strain. Quick collimation and horizontal angle measurement combine for fast and easy aiming of layout and alignment tasks.

The market- and time-proven B series automatic levels provide outstanding precision for a multitude of leveling tasks.

Precise, Reliable Automatic Compensator

Superior Telescope

Quick Collimation

Horizontal Angle Measurement

Stadia lines on the reticle allow distance measurements

Rapid, Fast Setup

Easy to Adjust

B20, B30, B40 Specifications

Model	B20	B30	B40
Telescope			
Length	213 mm (8.40 in.)		
Magnification	32x	28x	34x
Objective Aperture	42 mm (1.65 in.)	36 mm (1.42 in.)	32 mm (1.26 in.)
Resolving Power	3"	3.5"	4"
Field of View (at 100m/328ft.)	1°20' 2.3m / 7.3 ft.)	1°23' 2.5m / 8.2 ft.)	
Minimum Focus	.02m (7.9 in.) from end of telescope .03m (1 ft.) from instrument center		
Image	Erect		
Reticle Pattern	Wedge	Cross Line	
Stadia Constant	0		
Stadia Ratio	100		
Focusing Knob	2 - Speed	1 - Speed	
Sighting Aid	Peep Sight		Gun Sight
Lens Hood	Retractable	—	



Accuracy (standard deviation for 1 km double run leveling)			
Without Micrometer	0.7 mm (0.03 in.)	1.5 mm (0.06 in.)	0.2 mm (0.008 in.)
With Micrometer	0.5 mm (0.02 in.)	—	
Compensator			
Type	Pendulum compensator with magnetic damping system		
Sighting Accuracy	0.5"	0.5"	—
Working Range	± 15°		
CIRCULAR LEVEL			
Sensitivity	10"/2 mm		
Mirror	Pentaprism	Plane Mirror	
HORIZONTAL CIRCLE			
Diameter	103 mm (4.1 in.)		
Graduations	1°/1 gon		
GENERAL			
Horizontal Motion Drive	Clampless, endless, double-sided knobs		
Water Resistance	IPX6 (IEC 60529:2001)		
Operating Temperature	-20 to +30°C (-4 to +122°F)		
Size - Width	130 mm (5.12 in.)		
Length	215 mm (8.46 in.)		
Height	140 mm (5.51 in.)	135 mm (5.31 in.)	
Weight	1.85 kg (4.1 lb.)	1.7 kg (3.7 lb.)	

Auto Level (Sua) SL-SE-003



SL-SE-003

Model	DSC220	DSC222	DSC224	DSC226	DSC228	DSC230	DSC232
Standard deviation for 1 km double run leveling	2.5 mm	0.3 in.	2.0 mm	0.3 in.	1.5 mm	1.0 mm	
Image	Erect						
Magnification	20 X	22 X	24 X	26 X	28 X	30 X	32 X
Objective aperture	34 mm	36 mm				38 mm	
Field of view	1°20'						
Minimum focus	0.3m						
Multiplication constant	100						
Additive constant	0						
Compensator range	± 15°						
Compensator setting accuracy	± 0.8"	± 0.6"				± 0.5"	
Sensitivity of bubble	8"/2mm						
Horiz. circle reading	1° or 1gon						
Instrument weight	1.85kg						
Tripod	M16 or 5/8"						

Surveying Equipments



SL-SE-004

Dumpy Level SL-SE-004

Special Features:

- Internal Focusing fitted with horizontal circle
- Sensitive bubble is mounted on the side of the telescope
- Strong
- Compact
- Light in weight
- Finest optical quality
- Excellent folding mirror
- Observer can read the bubble with ease

Designed For :

Precision and reliable operation in all types of surveying locations

Technical Data :

Telescope Model	Image	Length	Magnification	Objective Aperture	Object Glass Diameter	Short Focus	Stadia Ratio	Additive Constant	Accuracy	Circle Diameter	Graduation	Plane Level Sensitivity
Model DL - 9	Erect	228 mm	28 X	38 mm	40 mm	1.5 M	1:100	0	±2.5 mm/Km	95 mm	10 Minutes	40"/2 mm
Model DL - 7	Erect	178 mm	28 X	38 mm	40 mm	1.5 M	1:100	0	±2.5 mm/Km	95 mm	10 Minutes	40"/2 mm



SL-SE-005

Vernier Theodolite SL-SE-005

Unique Features :

- Quality telescope
- High contrast optical system fitted with coated object lens
- Cylindrical Steel / gun metal axis extra long for stability
- Erect image for comfort and trueness
- Excellent portability

Ideal To Be used In :

- Engineering surveys
- Construction projects
- General layout work
- Cadastral work
- Traversing triangulation
- Mining

Telescope Model	Image	Length	Magnification	Effective Aperture	Field of View	Short Focus	Stadia Ratio	Stadia Constant	Resolving Power	Circle Diameter	Graduation	Vernier Reading	Plane Level Sensitivity	Vertical Circle Level
Model VTO - 20	Erect	178 mm	25 X	38 mm	2.6 M at 100 M	1.5 M	1:100	0	4"	111.13 mm	20'	20'	45"/2 mm	1"/2 mm
Model VTO - 10	Erect	178 mm	25 X	38 mm	2.6 M at 100 M	1.5 M	1:100	0	4"	111.13 mm	10'	10'	45"/2 mm	1"/2 mm



SL-SE-006

Topcon DT-200 Series Digital Theodolite SL-SE-006

The Topcon DT-200 series integrates the same high-quality advanced absolute circle reading technology found in Topcon's high-performance total station products for more accurate field calculations; and they continue to deliver the highest quality optics and electronics you expect to find in Topcon theodolites.

Topcon DT-200 Series Features:

Long Battery Life

Waterproof and Dustproof Digital Theodolites

Available in three affordable models delivering 5°, 7°, or 9° angle accuracy, there is a DT-200 theodolite perfect for any job. Like the DT-100 series, the DT-200 series weathers any wet or dust conditions in the field, allowing for a more productive day during inclement weather. All models are also compact and lightweight for easy portability; and their simple operation provides precise measurement in a functional, hassle-free package.

Longer battery powering duration

Longer battery powering durations using alkaline batteries. Continuous angle measurement for 150 hours. Laser continuous angle measurement for 45 hours.



• **Absolute encoder is used**

Detection of 0° position is no longer needed. Stable, high-accuracy measurement.

• **Laser pointer**

The laser pointer is injected in collimation direction by simply operating one switch. Workers can perform work without guidance by observation personnel.

• **Excellent waterproof structure**

The theodolite body is guarded against a sudden torrential rain and dirt. The theodolite can be used reliably at work sites under severe conditions.

IP66 protection class (Dustproof and waterproof types)

Model		DT-205	DT-207	DT-205/209 P
	Magnification	30x	30x	26x
	Field of view	1°30'	1°30'	1°30'
	Resolving power	2.5"	2.5"	3"
	Minimum focus	90cm	90cm	90cm
	Stadia ratio	100	100	100
	Stadia constant	0	0	0
	Sighting Collimator	Double	Double	Double
	Method	Absolute Reading	Absolute Reading	Absolute Reading
		Horizontal: 2 sides	Horizontal: 2 sides	Horizontal: 1 side
	Detecting	Vertical: 1 side	Vertical: 1 side	Vertical: 1 side
		1°5'	5°10'	10°20'
	Minimum Reading	3"	3"	9"
	Accuracy	7mm	7mm	7mm
Electronic Angle Measurement	Diameter Circle	2 sides	2 sides	1 side
	Display	Unit	LCD 7 segments	LCD 7 segments
		•		
Data Output	Serial signal connector	(RC-232C)	—	—
	Display	•	•	•
Illumination	Reticle	•	•	—
		•		
	Tilt sensor	(Vertical)	—	—
Compensator	Compensating range	±3'	—	—
	Magnification	3x	3x	3x
	Field of view	3°	3°	3°
Optical Flattening Telescope	Focusing	0.5m to ∞	0.5m to ∞	0.5m to ∞
	Plate level	40°/2 mm	40°/2 mm	60°/2 mm
Level Squintable	Circular level	10°/2 mm	10°/2 mm	10°/2 mm
Water Protection	Standard	IP 66	IP 66	IP 66
Power Supply	Battery	4AA batteries	4AA batteries	4AA batteries
Operating time (A.L.)	Theodolite only	140 h	150 h	170 h
Operating Temp.		-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
Weight		4.1kg	4.1kg	3.4/3.9kg

Surveying Equipments



SL-SE-007

South Electronic Theodolite ET-02/05 SL-SE-007

The ET series electronic theodolite integrates the same high-quality advanced absolute circle reading technology found in South's high-performance total station products for more accurate field calculations; and they continue to deliver the highest quality optics and electronics you expect to find in South theodolites.

Specifications	ET-02	ET-05
Angle Measurement:		
Measuring Method	Absolute Code	
Circle Diameter	70mm	
Min Display Unit	1"/5" Selectable	
Accuracy	2"	5"
Horizontal Angle	[Dual]	
Vertical Angle	[Dual]	
Telescope		
Image	Erect	
Tube Length	157mm	
Effective Aperture	43mm (EDM:50mm)	
Magnification	30x	
Field of view	1°30'	
Minimum Focusing Distance	1.4m	
Resolving Power	3"	
Stadia Ratio	100	
Stadia Constant	0	
Auto Compensator		
System	Liquid-Electric Detection	
Work Range	±5°	
Resolving Power	1"	
Vial		
Plate Vial	30"/2mm	
Circular Vial	10"/2mm	
Optical Plummet		
Image	Erect	
Magnification	3x	
Focusing Range	0.5m-∞	
Field of View	5°	
Display		
Type	LCD Display 2 Sides	
On-Board Battery		
Power Supply	Rechargeable Ni-H Battery/AA Battery	
Voltage	DC 6V	
Continuous Operation Time	10 Hours	
Size & Weight		
Dimension	1143x411x108x117mm	
Weight	3.2Kg	



Surveying Equipments

Topcon Gowin Total Station TKS-202 SL-SE-008



SL-SE-008

Finest Quality, Only From Gowin

Leveraging on Topcon's optimal manufacturing excellence, GOWIN ensured every single production process of the TKS-202 Total Station is in compliance with international standards and went through stringent quality control.

From fully-automated EDM trials, to 48 hours of non-stop extreme environment conditioning testing, GOWIN Total Station demonstrated its durability and operational superiority, highlighting GOWIN commitment to constantly improve.

The Topcon Gowin Total Station TKS-202 is ideally suited for all jobs requiring the accuracy and versatility of a high-quality total station. Its ease of use makes it ideal for construction jobs like layout. Its 2-second accuracy makes it perfect for the most demanding surveying and measuring tasks. Its low price makes it the right choice for every budget.

The Topcon Gowin Total Station TKS-202 provides an accurate, low cost measuring solution featuring:

- 2" angle accuracy provides 1/16th of an inch accuracy at 1,000ft.
- Dual key boards with an expanded numeric keypad for faster data input.
- Accurately measure up to 2,000m with a single prism.
- Internal data storage for up to 24,000 points.
- Single axis compensator with $\pm 3'$ compensating range.
- IP54 environmental protection rating.

With a full alpha-numeric keypad and onboard memory that will hold up to 24,000 points, a 14-hour Li-on battery life, and an IP54 environmental rating, the Topcon Gowin Total Station TKS-202 is a full-featured instrument designed to meet the most rugged demands.

Onboard software includes functions such as road, moving line measurement and resection. For added efficiency, it is compatible with all current Topcon® and Sokkia® field controllers with a GTS series conventional total station driver installed.

Why work with out-dated instruments? The new Topcon Gowin Total Station TKS-202 lets you economically add the versatility and efficiency of a high-quality total station for all your layout, measuring, and surveying jobs.

Topcon Gowin Total Station TKS-202 Technical Specifications

Technical Specifications		
Model Name	Gowin TKS-202	
Telescope	Objective Lens Diameter	45mm (TDM: 50mm)
	Magnification	30x
	Image	Erect
	Field of View	1°30'
	Resolving Power	3.0"
	Min. Focus Distance	1.3m
Angle Measurement	Accuracy	2"
	Method	Absolute
	Minimum Reading	17.3"
Distance Measurement		
	1 Prism	2,000
Distance Range	3 Prisms	2,700m
Accuracy		$\pm (2mm + 2ppm \times D^{**})m, s.s.e.$
	Fine Measurement Mode	1.2 sec (Initial 4 sec.)
	Coarse Measurement Mode	0.7 sec.
Measuring Time	Tracking Measurement Mode	0.4 sec.
Atmospheric Correction Range		Yes
Prism Constant Correction Range		Yes
Software & Memory		
On-Board Software Functions	Data Collection, Resection, Road, Stakeout, Area Calculation, Height Measurement, etc.	
Internal Memory		24,000 points
Interface		RS-232C (Standard)

Surveying Equipments



	Display Unit	Graphics LCD, 2 Sides
Display	Keyboard	24 Alpha-Numeric Key
	Tilt Correction (Automatic Index)	
Tilt Sensor		Yes
Correction Method		Liquid Type
Compensating Range		± 3"
	Level Sensitivity	
Plane Level		30" 2mm
Circular Level		10" 2mm
	Optical Plummet / Telescope	
Image		Erect
Magnification		3x
Focusing Range		0.5 to infinity
Field of View		5° and above
	Others	
Protection against water and dust***		IP 54 (with BT-L1 Battery)
Operating Temperature		-20°C ~ 50°C (-4°F ~ 122°F)
Dimension		336 (H) x 184 (W) x 132 (L) mm
Weight (with Battery)		4.8kg
On Board Battery		BT-L1 (Lithium-ion)
Battery Charger		DC-L1
	Maximum Operating Time	
Including Distance Measurement		14 Hours
Angle Measurement Only		60 Hours
Output Voltage		DC 10V



SL-SE-009

Topcon's new ES 100 Series Total Stations - New Advanced Design with Superior Technology SL-SE-009

The ES series electronic theodolite integrates the same high-quality advanced absolute circle reading technology found in South's high-performance total station products for more accurate field calculations; and they continue to deliver the highest quality optics and electronics you expect to find in South theodolites. The new ES Series was designed from the ground up to deliver the very latest technology advantages, all in a small, sleek design - you'll appreciate the advantages from the very first measurement.

Featuring a class leading EDM unit, the ES is able to measure up to 4,000m to standard prisms, and can measure in reflectorless mode up to 500m at an incredible 3mm + 2ppm accuracy.

Measurements are carried out faster than ever, and at 15mm (over 30m), the bright red laser dot pinpoints features with ease.

Ultra-Powerful, Advanced EDM 500 m non-prism range
4000 m prism range
Less than 1 second line measurement

Longlink

The exclusive LongLink™ communications functionality in every ES Series model provides operational capabilities never before offered in a manual total station. With a 300m range wireless communication using Bluetooth Class 1 technology, you can now operate the data collector from the "smart-spot" of the crew, the prism pole. Also referred to the two-man, economical robot solution, Topcon's new LongLink™ technology brings a whole new level of flexibility to your manual field crew.

Advanced Angle Encoder System

"Best in Class" 1" angle accuracy available

Incorporates exclusive IACS (Intelligent Automatic Calibration System) on 1" & 2" models



Ultimate in Rechargeable operation – 36 Hours!

Up to 36 hours of operation on a single charge. *1
Eliminates the need for nightly recharging and carrying extra batteries.
Work with confidence all day without the worry of dead batteries.

Rugged, Waterproof Design

Waterproof/Dustproof IP66 design handles the toughest environments.
Magnesium-alloy housing providing stable angle accuracy. Completely

Easy Access USB 2.0 Memory

Up to 8MB storage
Environmentally protected
Compatible with industry standard accessories and cables

Quick Specifications	
Angle Measurement	
	Min. Resolution/Accuracy
ES-101	0.5"/1"
ES-102	1"/2"
ES-103	1"/3"
ES-105	1"/5"
ES-107	1"/7"
IACS (Independent Angle Calibration System)	Standard on 1" & 2" models
Compensation	Dual-axis compensation
Distance Measurement	
Prism EDM Range	4000m (ES-107: 3000m)
Prism EDM Accuracy	2mm+2ppm
Non-Prism Range	500m
Non-Prism Accuracy	3mm+2ppm (0.3-200m)
Measuring Time	Fine: 0.9 sec
	Rapid: 0.7 sec
	Tracking: 0.3 sec
Communications	
LongLink™ near communications utilizing Class 1 Bluetooth	
USB 2.0 Slot	
RS-232C Serial	
General	
Display/Keyboard	
Battery Operation	Dual, Graphic, Backlit LCD (ES-107 Single)
Dust/Water Protection	up to 36 hours
Wireless Connection	IP66
Operating Range	Bluetooth Class 1
	-20°C to +50°C
	-30°C to +50°C *
	-20°C to +60°C **

Surveying Equipments



GPS
SL-SE-010

GPS SL-SE-010

Physical & Performance

Unit dimensions, WxHxD	2.7" x 6.2" x 1.2" (6.9 x 15.7 x 3.0 cm)
Display size, WxH	1.6" x 2.2" (4.1 x 5.6 cm)
Display resolution, WxH	120 x 160 pixels
Display type	4 level gray
LCD Weight	7.7 oz (218 g) with batteries
Battery	2 AA batteries (not included)
Battery life: 18 hours Waterproof	Yes (IPX7)
Floats	yes
High-sensitivity receiver	yes
Interface	serial and USB



Planimeter In Box

Digital Planimeter SL-SE-011

Planimeter Digital Planimeter KP-90N-Series with the most advanced functions and perfect reliability. The most standard model of "Katzumi Placom" N-Series has made the excitingly highest attainment in the history of Placom Digital Planimeter KP-90N ever made. Measuring capacity is remarkably enlarged. Measuring by 6-digit pulse count enables to measure 100 times larger accumulative area than ordinary planimeters. Easy calculations of Cumulative and Average Value Measurement.

Technical Specifications				
Object Parameter	KP-90N	KP-92N	KP-80N	KP-82N
Type	Roller Type	Length	Polar Type	Length
	With Computing Function	Single Function	With Computing Function	Single Function
Liquid Crystal, 8-digit Figures				
Display	13 Symbols	6 Symbols	13 Symbols	6 Symbols
Symbol	Batt-E, SCALE Memo, Hold cm2, m2, km2, in2, ft2, acre etc.	Batt-E Memo, Hold cm2, in2, etc.	Batt-E, SCALE Memo, Hold cm2, m2, km2, in2, ft2, acre etc.	Batt-E Memo, Hold cm2, in2, etc.
Converting Function	Unit and Scale value	Unit(m2, cm2)	Unit and Scale value	Unit(m2, cm2)
Accumulated Measuring Value				
Maximum 10m2(Scale 1:1)				
Measuring Range	Maximum vertical width: 725mm Horizontal roller rotating length: 30m		Maximum, with the pole put outside the pattern: 300mm in diameter Maximum, with the pole put inside the pattern: 800 mm in diameter	
Accuracy				
Within $\pm 0.2\%$ (Within $\pm 2/1000$ pulses) Built-in NiCd Battery(rechargeable through AC Adapter)				
Power Supply				
AC Adapter 100-240V (Auto-power-off function is provided.)				
Operating Duration				
Approx. 30 hours of continuous operation				
Battery Charging Time				
Approx. 15 hours				
Main Unit Weight	750g		780g	



SL-SE-012

Leveling Staff SL-SE-012

Leveling Staff 4 meter 4 section complete in full aluminum in best quality with water proof canvas cover.
 Leveling Staff 5 meter 5 Section complete in full aluminum in best quality with water proof canvas cover.
 Leveling Staff 6 meter 5 Section complete in full aluminum in best quality with water proof canvas cover.
 Leveling Staff 4 meter 3 Section complete in full aluminum in best quality with water proof canvas cover.
 Leveling Staff 5 meter 3 Section complete in full aluminum in best quality with water proof canvas cover.
 Leveling Staff 6 meter 3 Section complete in full aluminum in best quality with water proof canvas cover.



SL-SE-013

Tripod SL-SE-013

Wooden Tripod Heavy Duty made by good technology for total station with canvas cover.
 Light Duty Wooden Tripod made by good technology for electronic theodolite with canvas cover.
 Aluminum Tripod Heavy Duty made by good technology.
 Aluminum Tripod Light Duty made by good technology.
 Aluminum Ordinary Tripod made by good quality.
 Aluminum With Iron Pipe Ordinary Tripod made by good quality.



SL-SE-014 / 015

Ranging Rod Socket Type SL-SE-014

Ranging rod 2mtrs./2 folds in canvas cover R-1
 Ranging rod 3mtrs./3 folds in canvas cover R-2

Ranging Rod Screw Type SL-SE-015

Ranging rod 2mtrs./2 folds in canvas cover R-3
 Ranging rod 3mtrs./3 folds in canvas cover R-4



SL-SE-016

Plane Table Set SL-SE-016

P.T. Set 600x750x15 mm with P.T. Boards, Stand & Accessories PT-1
 P.T. Set 600x750x22 mm with P.T. Boards, Stand & Accessories PT-2
 P.T. Set 600x750x22 mm with P.T. Boards, Stand & Accessories as per IS:PT-3
 P.T. Set 600x750x22 mm with P.T. Boards, Stand & Accessories JOHNSON Type PT-4



SL-SE-018

Prismatic Compass with Aluminum Tripod SL-SE-018

Prismatic Compass 100 mm dia. PC-1
 Prismatic Compass 112 mm dia. PC-2
 Prismatic Compass 125 mm dia. PC-3
 Prismatic Compass 150 mm dia. PC-4

Compass SL-SE-019

Hemmi's Compass



SL-SE-019

Surveying Equipments



SL-SE-020

Survey Compass SL-SE-020

100 mm dia with aluminium tripod SU

Clinometeric SL-SE-021

Compass Brass CC



SL-SE-021



SL-SE-022 / 023

Survey Measuring Chain ISI SL-SE-022

Survey Measuring Chain 30 metres long SC1-30
Survey Measuring Chain 20 metres long SC1-20
Arrows for Survey Chain Big Size ASC-8
Arrows for Survey Chain Small Size ASC-12
Canvas Cover for Measuring Chain CCM

Survey Measuring Chain SL-SE-023

Survey Measuring Chain 30 metres long SC-30
Survey Measuring Chain 20 metres long SC-20
Survey Measuring Chain 10 metres long SC-10
Survey Measuring Gunners Chain SMG
Survey Measuring Revenue Chain SMR



SL-SU-024

Survey Umbrella SL-SE-024

Survey Umbrella 1.5 metres dia SU-1.5
Survey Umbrella 2.0 metres dia SU-2.0
Garden Umbrella 2.0 metres dia GU-2.0



SL-SE-026

Cross Staff SL-SE-025

Cross Staff 4" aluminium CSA-4
Cross Staff 6" aluminium CSA-6
Cross Staff 4" Brass CSB-4
Cross Staff 6" Brass CSB-6
Cross Staff 4" Wooden CSW-4

Octagonal Cross Staff In Box SL-SE-026

Octagonal French Cross Staff Aluminium OCS-A
Octagonal French Cross Staff Brass OCS-B



SL-SE-027

Optical Square In Box SL-SE-027

Optical Square Aluminium OSA
Optical Square Brass OSB
Optical Square Heavy OSH
Round Optical Square Brass RSB
Prism Square PS
Line Ranger LR

Substance Bar SL-SE-028

Substance Bar 2 meters SB-2
Substance Bar 3 meters SB-3



SL-SE-028



SL-SE-029

Abney Level In Case SL-SE-029

Abney Level 125 mm AL-125
Abney Level 229 mm AL-228

Box Sextant Full Brass With Case SL-SE-030

Box Sextant Brass BSB



SL-SE-030



SL-SE-031

Nautical Sextant SL-SE-031

Nautical Sextant NS

Ceylon Ghat Tracer SL-SE-032

Ceylon Ghat Tracer CG



SL-SE-032



SL-SE-033

Telescope Alidade SL-SE-033

Telescope Alidade TA

Measuring Tape SL-SE-034

5mm, 10mm, 30mm, 50mm, 100mm



SL-SE-034