

# Positioning Tools and Accessories

AUTOMATIC LEVELS | DIGITAL THEODOLITES  
SLOPE LASERS | UTILITY LASERS | LASER LEVELS  
2D MACHINE CONTROL | ACCESSORIES



— “ —————  
Topcon products are more durable,  
more user friendly, and built to work better  
in the real world.



**Scott Schumacher**  
Pyramid Contractors

# Positioning Tools and Accessories Catalog

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# AT-B Series

## Automatic Levels



- Three models - 32x, 28x, and 24x magnifications
- Ultra-short 20 cm focusing
- All-weather dependability
- $\pm 5$  Degrees self-leveling range
- Clampless, endless fine horizontal adjustments

### Available Models:

- AT-B2
- AT-B3A
- AT-B4A

### Rapid, Stable, and Durable Compensator

The compensator of AT-B Series incorporates four suspension wires made of super-high-tensile metal, which features a minimal thermal expansion coefficient – providing unmatched durability and accuracy. The 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 Measurement

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

### 20 cm - Short Minimum Focus

The AT-B Series can focus on objects 20 cm in front of the telescope. This feature dramatically facilitates working in confined spaces.

### All-weather Dependability

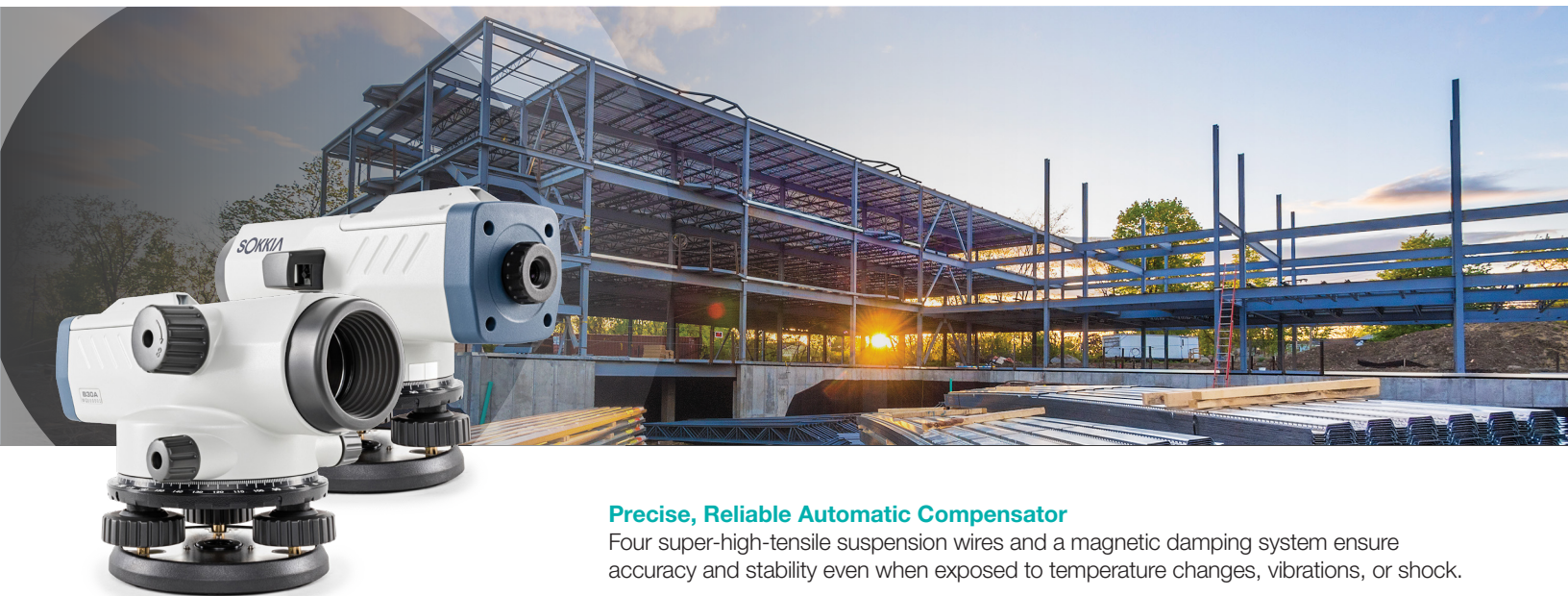
With the IPX6 rating, the instrument is protected against powerful water jets from all directions, meaning the AT-B Series withstands a sudden shower or torrential rainfall. The advanced protection design also deters clouding or condensation inside the telescope.

Specifications	AT-B2	AT-B3A	AT-B4A
Magnification	32x	28x	24x
Field of View	1°20'	1°25'	1°25'
Min. Focus from center of the instrument	0.3 m		
Image	Erect		
Stadia	Yes (1:100)		
Focusing Knob	2-speed	1-speed	1-speed
Setting Accuracy	0.3 in.	0.5 in.	0.5 in.
Working Range	$\pm 15$ ft.	$\pm 15$ ft.	$\pm 15$ ft.
Dust / Water Protection	IPX6 (IEC 60529:2001)		
Operating Temperature	-20°C to 50°C		
Size	122 x 215 x 140 mm	122 x 214 x 140 mm	
Weight	1.85 kg	1.5 kg	



# B Series

## Automatic Levels



- **Tough and compact bodies sealed against water, humidity and dust**
- **Quick setup, easy sighting and superior durability against shock and vibration**
- **Exceptionally bright and sharp view**

### Precise, Reliable Automatic Compensator

Four super-high-tensile suspension wires and a magnetic damping system ensure accuracy and stability even when exposed to temperature changes, vibrations, or shock.

### Advanced Telescope

The outstanding design of the telescope provides an exceptionally bright and sharp view that reduces operator's eye strain. An ultra-short focus distance of 20 cm from the end of the telescope\* makes it easy to use in confined locations. Two-speed focus knob (B20) switches between coarse and fine for even faster operation.

*\*30 cm from instrument center*

### Quick Collimation

Endless horizontal motion drives can be operated with either hand for fast and easy aiming of layout and alignment tasks.

### Horizontal Angle Measurement

Horizontal angles can be read in 1 degree or 1 gon units. A freely rotatable circle allows any angle reading from zero. Right angles can be quickly set for layout and alignment tasks. The readout window is conveniently located on the instrument base – directly below the eyepiece.

### Available Models:

- B20
- B30A
- B40A

Specifications	B20	B30A	B40A
Magnification	32x	28x	24x
Field of View	1°20' (2.3 m)	1°25' (2.5 m)	
Minimum Focus	0.2 m from end of telescope 0.3 m from instrument center		
Image	Erect		
Stadia	Yes (0:100)		
Focusing Knob	2-speed	1-speed	
Setting Accuracy	0.3 in.	0.5 in.	
Working Range	±15 ft.		
Water resistance	IPX6 (IEC 60529:2001)		
Operating Temperature	-20°C ~ 50°C		
Size	130 x 215 x 140 mm	130 x 214 x 140 mm	130 x 214 x 135 mm
Weight	1.85 kg	1.5 kg	

# DT-300 Series

Advanced Digital Theodolite



- High-accuracy (5", 7" and 9" models) measurements
- Ultra-rugged IP66 dust and heavy rain protection
- Compact and lightweight
- Long-lasting Li-ion or AA battery life
- Easy-to-use LCD backlit display
- Precise laser pointer guidance
- Embedded tilt sensor for 5" and 7" models

## Available Models:

- DT-305/PS
- DT-307/PS
- DT-309G/PS
- DT-305L/PS
- DT-307L/PS
- DT-309LG/PS

## Power Savings Performance

The DT-300 is a lightweight compact alignment and angular measurement device, which boasts up to 30 working days of power, the highest waterproof and dust protection, and convenient high-precision laser guidance.

## Work Fast, with Precision

With our DT-300 you'll be up and working fast, thanks to its simple interface and large, easy-to-see backlit LCD. There's an optical plummet that makes set up over a control point easy, and a tilt sensor that provides  $\pm 3$  minute angle correction.

With a range of angular accuracies available, Topcon offers the precision, durability, and advanced technology you need to complete your work with confidence and right on schedule.

Specifications		DT-300
Telescope	Objective lens	45 mm
	Magnification	30x / 26x (9")
	Laser Pointer, class	Class 2
Angle Accuracy		2", 5", 7", 9"
Display		2 sides / 1 side (9")
Plummet		Optical
Data Output		RS-232C (2")
Compensator	Tilt sensor	1 Axis (2", 5", 7")
	Plate level	40" / 2 mm
	Circular level	10' / 2 mm
Water Protection		IP66
Operating time	Theodolite only	4x AA, ~ 230 hours (Optical Li-ion: BDC71)
Operating Temperature		-20°C to 50°C
Dimensions (D x W x H)		173 x 181 x 318 mm
Weight		4.1 kg



# DTx50 Series

## Digital Theodolites



- **2.5"** – unsurpassed telescope resolving power
- **IP66** – industry's highest dust/water protection
- **Absolute encoders**
- **Lightweight**
- **Standard LR6/AA batteries**
- **Up to 170 hours of operating time**

### Available Models:

- DT-550/PS
- DT-750/PS
- DT-950G/PS
- DT-550L/PS
- DT-750L/PS
- DT-950LG/PS

### Durable Lightweight Performance

The DTx50 is a lightweight compact alignment and angular measurement device, which boasts up to 30 working days of power – the highest waterproof and dust protection, and convenient high-precision laser guidance.

### Precision and Speed

With our DTx50 you'll be up and working fast, thanks to its simple interface and large, easy-to-see backlit LCD. There's an optical plummet that makes set up over a control point easy, and a tilt sensor that provides  $\pm 3$  minute angle correction.

With a broad range of angular accuracies available, this Sokkia theodolite delivers precision, durability, and advanced technology to help you finish the job with confidence.

Specifications		DTx50
Telescope	Objective lens	45 mm
	Magnification	30x / 26x (9")
	Laser Pointer, class	Class 2
Angle Accuracy		2", 5", 7", 9"
Display		2 sides / 1 side (9")
Plummet		Optical
Data Output		RS-232C (2")
Compensator	Tilt sensor	1 Axis (2", 5", 7")
	Plate level	40" / 2 mm
	Circular level	10' / 2 mm
Water Protection		IP66
Operating time	Theodolite only	4x AA, ~ 230 hours (Optical Li-ion: BDC71)
Operating Temperature		-20°C to 50°C
Dimensions (D x W x H)		173 x 181 x 318 mm
Weight		4.1 kg

# RL-H5 Series

## Self-Leveling Construction Laser



- Long-range operation
- Smart long-range receiver
- Simple, intuitive manual slope capability
- Tough IP66 construction rating
- $\pm 5$  Degrees self-leveling Range
- Up to 100 hours battery life

### Long-range High Accuracy Laser

With great distance and high-accuracy, the RL-H5 Series is simple to use for checking elevations.

### Easy to use

With electronic self-leveling, you press the power button and go right to work in seconds. If the RL-H5A / RL-H5B gets disturbed on the job it relevels itself automatically. The self-leveling motors are accurate to  $\pm 10$  arc seconds (RL-H5A) /  $\pm 20$  arc seconds (RL-H5B).

### Long Range Operation

Need to shoot elevations up to 400 m from your laser? No problem — this instrument instrument has the power and range to cover a 800 m (RL-H5A) / 400 m (RL-H5B) diameter job site.

### Long Battery Life

The RL-H5A / RL-H5B gives you the option of up to 60 hours of continuous usage with the rechargeable battery pack or 100 hours with (4) D cell batteries.

### All-Weather Dependability

With the IP66 rating, the RL-H5A / RL-H5B is job site tough and can withstand dust, a sudden shower and even torrential rainfall.

### Available Models:

- RL-H5A
- RL-H5B

Specifications	RL-H5A	RL-H5B
Accuracy	H: $\pm 10$ arc seconds	H: $\pm 20$ arc seconds
Self-Leveling Range	Horizontal $\pm 5^\circ$	
Working Area (Diameter)	800 m	400 m
Rotation Speed	600 rpm	
Dust / Water Protection	IP66	
Operating Time	Alkaline: 100 hours; Ni-MH: 60 hours	
Operating Temperature	$-20^\circ\text{C}$ to $50^\circ\text{C}$	
Size	205 x 211 x 172 mm	
Warranty	5 Years	



# RL-SV Series

## Construction Slope Laser



- Long-range operation (800 m)
- Up to 120 hours battery life
- Tough IP66 protection rating
- Included remote control

### Slope Applications

The RL-SV1S can be used for a wide variety of single slope applications. Slopes up to  $\pm 5\%$  can be used in the X axis. Additionally, the RL-SV2S can be used for a variety of horizontal, sloping laser applications. Slopes up to  $\pm 5\%$  can be used in either the X or Y axis.

### High-powered

With an operating range of over 800 m (diameter), the RL-SV1S and RL-SV2S have the power to cover even the biggest projects.

### Long Battery Life

Contractors who want a laser with a long battery life will love the RL-SV1S and RL-SV2S. With an operating time of 120 hours on alkaline batteries or 65 hours with the rechargeable Ni-MH battery pack, these lasers will still be working long after others have quit.

### All-Weather Dependability

With the IP66 rating, the RL-SV1S and RL-SV2S are rugged and can withstand dust, a sudden shower and even torrential rainfall.

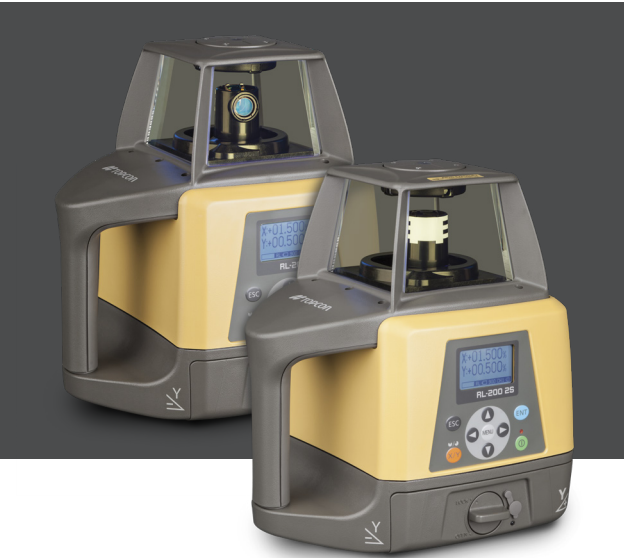
### Available Models:

- RL-SV1S
- RL-SV2S

Specifications	RL-SV1S	RL-SV2S
Accuracy	H: $\pm 10$ arc seconds	
Self-Leveling Range	Horizontal $\pm 5^\circ$	
Grade	Single, $\pm 5\%$	Dual, $\pm 5\%$
Working Area (Diameter)	800 m	
Rotation Speed	300, 600 rpm	
Dust / Water Rating	IP66	
Operating Time	Alkaline: 120 hours; Ni-MH: 65 hours	
Operating Temperature	$-20^\circ\text{C}$ to $50^\circ\text{C}$	
Warranty	5 Years	

# RL-200 Series

## Slope Lasers



- **7 Arc second accuracy**
- **Wide grade range (up to 25% slope) without slope blocks**
- **Up to 100 hours battery life**
- **Range up to 1,100 meters**
- **Full function remote (RL-200 2S)**

The revolutionary encoding system in the RL-200 Series provides the highest grade repeatability, 7 arc seconds, of any laser. No one even comes close. Setup after setup, time after time, you're always right on grade.

Choose from two models, RL-200 1S single slope or the RL-200 2S dual slope. The RL-200 1S provides single slopes from -5% up to +25%. The RL-200 2S provides dual slopes up to  $\pm 10\%$  in the X axis, or up to an industry leading -5 to +25% in the Y axis.

### Control the RL-200 2S – Remotely

When the RL-200 2S is operating, the RC-400 displays all operating information up to 300 m away. Change grade, select menu settings, check operational status, even verify battery life, all without touching the laser.

### Verifiable operation? It couldn't be clearer...

The RL-200 features a large, high-contrast, graphical display that clearly shows all functions at a glance.

### Available Models:

- RL-200 1S
- RL-200 2S

Specifications	RL-200 Series
Accuracy	H: $\pm 7$ arc seconds
Repeatability	7 arc seconds
Working Area (Diameter)	3,600 ft. (1100 m)
Rotation Speed	300/600/900 rpm
Dust / Water Protection	IP66
Operating Time	Alkaline: 100 hours; Ni-MH: 90 hours
Grade Range (single/dual)	RL-200 1S: -5 to +25 / N/A RL-200 2S: $\pm 10$ / -5 to +25
Size	253 x 218 x 174 mm
Warranty	5 Years

# TP-L6 Series

## Pipe Lasers



- **60-hour battery life**
- **Compact design adds flexibility to set up for tighter invert measurements**
- **Mobile app remote display makes seeing and configuring settings easier**
- **Less time climbing down into holes**
- **Multi-use battery powers a variety of other Topcon job site equipment**

### Available Models:

- TP-L6 B (Red)
- TP-L6 AV (Red)
- TP-L6 BG (Green)
- TP-L6 G (Green)
- TP-L6 GV (Green)

The TP-L6 pipe laser's smaller size, long-life battery, and convenient mobile app for Android devices make the unit one of the most flexible on the market. Field crew members are able to spend less time physically entering manholes to make adjustments, thereby increasing safety. The mobile app puts the user in control remotely to visually assist with configuring settings and making adjustments.

One fully charged battery can last for the whole week. Plus, the same multi-use battery can power a variety of other Topcon equipment on active job sites.

The TP-L6 is ideal for contractors that lay pipe required to be at specific slopes as well as projects involving trenching, sewers, mining, and tunneling.

### Command and Control – Remotely

The Topcon Laser Manager mobile app for Android puts many of the most common pipe laser functions directly in your hand, such as:

- Automatic target acquisition
- Moving the laser's beam left, right, or center
- Checking grade status
- Activating optional plumb beam
- Setting or calculating grade
- Changing laser mode to steady, flashing, or low-power
- Checking battery status
- Remote view of electronic bubble level



This functionality increases the speed of setting up the laser and reduces time workers spend in manholes, low-light situations and cramped spaces.

Specifications	TP-L6
<b>Auto Line Centering</b>	Yes
<b>Auto Grade Zeroing</b>	Yes
<b>Plumb Reference</b>	Yes
<b>Grade Range</b>	-15% to +40%
<b>Housing Construction</b>	Cast Aluminum
<b>Operating Temperature</b>	-20°C to 50°C
<b>Waterproof</b>	IPX8 when the battery holder is attached
<b>Warranty</b>	5 Years



# LS-B Series

## Laser Indicate Receivers and Remote Displays



- **Grade information without exiting machine**
- **360 degree detection**
- **Rugged, waterproof design**
- **Wireless capability**
- **Bright LED indicators**

The LS-B Series of machine mounted laser sensors are affordable grade indicate systems designed to improve grading and excavating production and accuracy.

Fast to setup and easy-to-use, these depth control sensors can be mounted to your earthmoving machines in minutes. Attach any of the LS sensors to a piece of equipment, turn it on, bench in and go to work. No more waiting for a grade checker or jumping off your machine to check your own grade. With Topcon laser sensors you know if you are above, below or on-grade all the time.

Put the LS-B Series laser sensor on a dozer, then move it to your excavator and then onto a scraper. They're so quick to move and convenient to use, you'll want to equip all of your earth moving machines with these production-boosting control systems.

### Loaded with Features

Each sensor is packed full of features including an Accuracy Mode and Battery Life Indicator and a Power Save/Auto Cut Off function to save battery life.

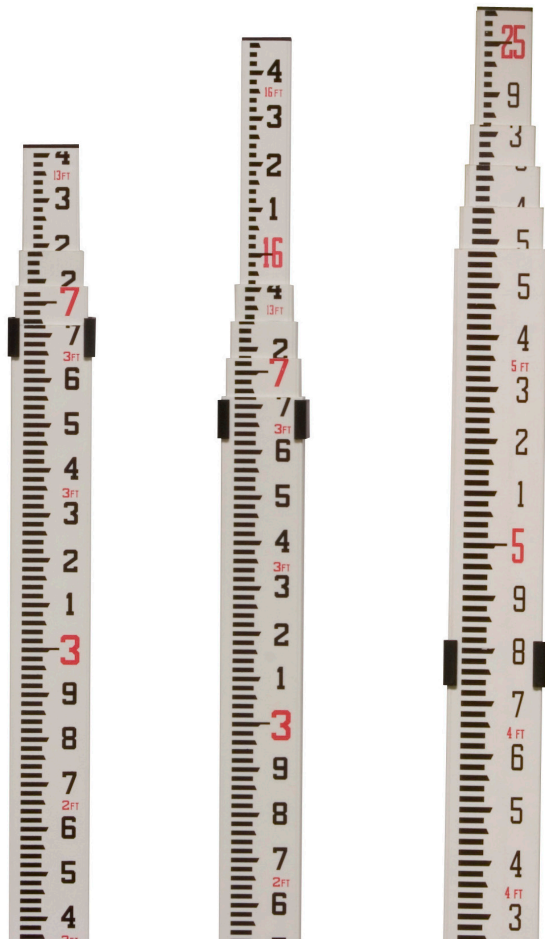
Choose from three different models: LS-B100, LS-B110 and LS-B110W. All have 360° laser detection range and the LS-B110 includes a Slope and Plumb indicator. You can offset the "on-grade" indicator as well as communicate directly to the Topcon in-cab control boxes for "automatic" mode applications. Use the LS-B110W sensor with the RD-100W, an optional wireless remote display unit. The LS-B10W Series with the RD-100W is perfect for excavating machines with magnetic mounting and 270° detection.

### Available Models:

- LS-B100
- LS-B110/LS-B110W
- LS-B10/LS-B10W
- RD-100W

Specifications	LS-B100
Detective Angle	360°
Detective Precision	Model 1: ±3 mm; Model 2: ±6 mm Model 3: ±15 mm; Model 4: ±30 mm
Continuous Operating Time	Up to 100 hours
Operating Temperature	-20°C to 50°C
Dust / Water Protection	IPX66 (Based on the standard IEC60529))
Warranty	1 Year
Specifications	LS-B10
Horizontal Detecting Range	270°
LED Grade Indicators	Red, Green and Red
Operating Time	Up to 100 hours
Size	115 x 40 x 180 mm with magnet
Weight	Less than 500 g
Warranty	1 Year





### Fiberglass Levelling Rods

- Extremely robust design with Anti-Jam® buttons made of brass ensure a long life.
- High-precision scale on front and back.
- Scale on back allowing for overall height readings.
- Ergonomically designed shape for a better grip.
- Non-conductive under dry conditions.
- Laser receiver brackets are easily attached.
- Free carrying bag and snap-on rod level included.
- Quality "Made in Germany".
- Rectangular design.

- 13' in 10ths
- 13' in inches
- 16' in 10ths
- 16' in inches

### Aluminum Tripod



Aluminum tripods are durable with a sling strap for easy hand or shoulder carrying.

### Elevating Tripod



The tripod features a robust aluminum top plate with double telescope for a large working range, and built-in bubble for easy set up.



**LS-80A**

Display readout on front and back.



**LS-80L**

Display readout on front and back.



**LS-100D**

Display readout on front and back.



**Remote Control for RL-200 2S**

RC-400



**Adjustable Target Kit**

TP-L5 / L6



**Sensor Holder 6 for LS-80 Series**

Holder 6



**Trivet Stand with Adjustable Pole**

Trivet Stand



**Trivet Handle for TP-L5 / L6**

Trivet Stand



**Rechargeable Battery  
for RL-SV1S and RL-SV2S**

BT-74Q



**Rechargeable Battery Holder  
for RL-SV1S and RL-SV2S**

DB-74C



**Battery Charger for RL-SV1S  
and RL-SV2S**

AD-15 (US)



**Magmount Bracket for LS-B100**

Magmount



**Vibe Pole for LS-B100**

Vibe Pole



[www.topconpositioning.com](http://www.topconpositioning.com)