

## HIGH ACCURACY SLOPE LASERS



**Put these World class slope laser technologies to work on your next job:**



- WORLD'S MOST ACCURATE GRADE REPEATABILITY
- 10 ARC SECOND ACCURACY ACROSS ENTIRE GRADE RANGE
- EASY-TO-SEE LCD FOR CLEAR, VERIFIABLE SLOPES
- ELECTRONIC BEAM MASKING
- ADJUSTABLE ROTATION SPEED AND HI ALERT

# It's time.

Whether you choose the **RL-H1Sa** single slope or the **RL-H2Sa** dual slope, you can be sure these lasers have the strength and accuracy to handle all of your mid to long-range grade checking and machine control needs.

Both lasers feature the same precision electronic encoder that virtually eliminates grade errors and ensures 10 arc second accuracy over their entire grade range. It's as simple as selecting your grade, in 0.001% increments, and going to work.

Topcon's RL-H slope lasers are also the easiest-to-operate lasers you'll ever use. All control and power management options are accomplished using the clearly marked buttons, and each selection is displayed on the large, high-contrast LCD. Topcon's slope lasers are so compact, portable and easy-to-use even a novice grade checker can operate it like a pro.

Whether you're working on flat pads, single, or dual slopes, you're assured an accurate elevation reference that's compatible with all laser receivers and grade checking sensors. Put your RL-H1Sa or RL-H2Sa to work as part of your integrated Topcon grade control systems including System Five for your grader, LS-B2 for your Dozer, and LS-B3 for your Excavator or Backhoe. The high-power beam is strong enough to provide a single elevation reference across your entire site!

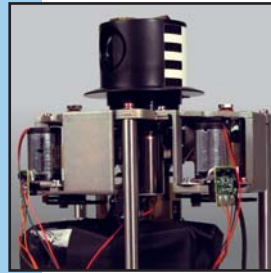
Seeing is believing, so if you haven't had the chance to see a live demonstration of the RL-H1Sa and RL-H2Sa, contact your nearest Topcon Authorized Dealer. In no time you'll know, it's time.



**RL-H1Sa/RL-H2Sa**  
High Accuracy Slope Lasers



## Developing innovative, cost-effective solutions, it's Topcon's passion. And it's what you'll find in every feature of the RL-H1Sa/RL-H2Sa.



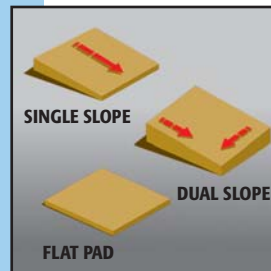
### 10 arc second repeatability/ CCD based self-leveling

The accuracy and reliability of the RL-H1Sa/RL-H2Sa is a direct result of Topcon's 40+ years of experience developing the World's most accurate Survey instruments. Combined with Topcon's exclusive CCD based leveling, these lasers will keep you on-grade all day long, day after day.



### High contrast LCD display

All functions of the laser are displayed on the large, graphical LCD display. Grade to 0.001, HI alert, battery usage, masking, rotation speed and leveling indicator. All of the function buttons are right there too. Topcon makes it easy, just set it up and go to work!



### Slope capabilities

**RL-H2Sa:** set single slopes from -8% to +8%.  
Dual slopes to a full  $\pm 10\%$  without tilting the laser

**RL-H1Sa:** set single slopes from -5% to +10%.



### Power options

Topcon provides a wide range of power options to keep you working. The alkaline batteries (standard package) provide over 40 hours of uninterrupted work! The optional rechargeable NiMH batteries provide 30 hours. Topcon even offers a 20' car battery cable to make sure your never left high and dry.

### Electronic Shutters keep the beam only where you want it

Shielding areas of your sites, or preventing two lasers from interfering with each other has never been so easy. No more metal shutters or blocking out sections, Topcon's RL-H1Sa and RL-H2Sa provide electronic shutters at the push of a button.

- Select from 1 to 4 quadrants
- LCD displays quadrants for easy verification of masking
- Change quadrants or eliminate them at any time without disturbing the laser



**Fast, dependable, durable, accurate, and the World's most repeatable!**  
**The RL-H1Sa/RL-H2Sa - all the slope laser, with all the features, you'll ever need.**

Dustproof and waterproof housing holds up to everyday bangs and bumps. And sturdy handles help prevent accidental drops

Large grade direction indicators remove guesswork and errors making slope set-ups a snap.

Sealed twist-to-lock battery compartment holds 4 "D" cell batteries (RL-H1Sa). Rechargeable batteries offer run-charge and optional car battery hookup (RL-H2Sa)



Integrated X and Y sighting scope (RL-H2Sa only)

Completely enclosed and sealed lighthouse protects rotating head and leveling mechanism from dust and dirt.

Control panel provides large, high-contrast LCD that displays X and Y grade in 0.001% increments (RL-H1Sa in X only). Color-coded, icon labeled function buttons provide clear, precise operation.

**Accessories**



**56045 Quick Release w/Adapter Set**



**56102 RD-10 Remote Display for LS-70A**



**56123 Rotating Laser Tangent Base**



**56968 Alignment Scope for RL-H**



**56997 Sensor LS-70A**

**Full range of Grade & Level Rods**

Ask your Topcon Dealer for details

**Full range of tripods to fit every job**

Ask your Topcon Dealer for details

**LS-70B SmartReceiver™**

- Two-way communication for HI Alert and Laser Battery Status.
- 11 levels of LCD display precision
- Adjustable Audible On-Grade horn
- Extended Battery Life
- Simple Snap in battery system
- Quick find beam finder system
- Durable, rubber bumper protection
- "SmartClamp" adjustable rod clamp
- Auto shut-off



**RL-H2Sa Series Package includes:**

- 56106 Sensor Holder 3 for LS-70A/B
- 56999 AD-9B Adapter (Charger)
- 57045 DB-51C NiMH Battery Holder
- 57047 BT-51 Q NiMH Battery
- 56994 Sensor LS-70B
- 7010-0193 Caution Sticker
- 7010-194 Laser Operator Card
- 7010-0159 Warranty Card (2 Year)
- 3060-0102 '9V' Battery (for LS-70A/B) (Qty. 1)
- 31326-91000 Carrying Case, RL-H1SA & RL-H2SA
- 31327-90050 Manual, RL-H2Sa





## The Leader in Positioning Technology...

Topcon offers positioning products that deliver unparalleled site-wide performance and integration. Topcon's history of technological advances and our reputation for superior reliability means there's no other company positioned to provide you with a better "Total Positioning Solution."

From survey to inspection Topcon, through our 170+ dealers throughout North and South America, provides the innovative technology that gives surveyors, civil engineers, contractors, equipment owners, and operators the competitive edge by addressing such critical issues as increasing profits, quality craftsmanship, improving productivity, lowering operating costs, and enhancing job site safety.

Full positioning integration field-to-finish: That's the goal of Topcon. When it's time for you to step up to the next level, it's time to turn to Topcon.

## The Leader in Customer Satisfaction...

To ensure that your Topcon laser maintains peak performance, your local Topcon dealer offers factory trained and certified service technicians. If service isn't available in your area, our factory offers a repair and return policy second to none.

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Specifications subject to change without notice

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## Specifications

|   | RL-H1Sa  | RL-H2Sa  |
|---|--|--|
| <b>Auto-Leveling Range</b>                            | ± 5°   | ± 5°   |
| <b>Operating Range</b>                                | 1150' (350m) Radius  | 1150' (350m) Radius  |
| <b>Beam Detecting Range</b> (When used with LS-70A/B) | 2m - 700m diameter (6' - 2300')  | 2m - 700m diameter (6' - 2300')  |
| <b>Laser Source</b>                                   | 780nm Infrared laser diode   | 685nm Visible laser diode  |
| <b>Laser Class</b>                                    | Class 1 Laser product  | Class 3A Laser product   |
| <b>Rotation Speeds</b>                                | Selectable: 300, 600 rpm   | Selectable: 300, 600, 900 rpm  |
| <b>Grade Setting Range</b>                            | -5% to +10%  | -8% to +8% (Single Axis)<br> X  +  Y  ≤ 10% (Dual Axis)                      |
| <b>Power Supply</b>                                   | 4 'D' size Alkaline batteries<br>Rechargeable battery (BT-51Q)<br>(Optional) | 4 'D' size Alkaline batteries<br>Rechargeable battery (BT-51Q)<br>(Standard) |
| <b>Continuous Operating Time</b>                      |  |  |
| <b>Alkaline Batteries</b>                             | Approx. 45 hours   | Approx. 45 hours   |
| <b>Rechargeable Battery</b>                           | Approx. 30 hours   | Approx. 30 hours   |
| <b>Tripod Screw</b>                                   | Flat & dome head type,<br>5/8" x 11 threads                                  | Flat & dome head type,<br>5/8" x 11 threads                                  |
| <b>Operating Temperature</b>                          | -20°C to +50°C (-4°F to +122°F)  | -20°C to +50°C (-4°F to +122°F)  |
| <b>Dimensions (L x W x H)</b>                         | 169mm x 169mm x 250mm<br>(6.7" x 6.7" x 9.8")                                | 169mm x 169mm x 250mm<br>(6.7" x 6.7" x 9.8")                                |
| <b>Weight</b>   | 2.7 kg. (6 lbs.) including batteries   | 2.7 kg. (6 lbs.) including batteries   |

## Other Topcon Laser Solutions:

### RT-5SW Wireless "Smart" Slope Laser

The RT-5S is the most repeatable laser in the world, with a level vial 10 times more repeatable than the competition! When you use the RT-5S, you're using World First technologies like the World's most accurate liquid level vial, thermal software, and a patented auto-alignment system.

The RT-5SW provides slopes to 25% without tilting the laser. And with the RC-300W two-way communicating remote, all features of the RT-5S are accessible. Battery life, rotation speed, and auto-alignment are a few of the time saving features displayed on the large LCD from up to 900+ feet away from the laser.

### General Construction Lasers:

The RL-H3C Series of infra-red construction lasers is a Topcon best value, with a host of World-Leading features at unbeatable prices. They're the perfect general construction laser for any contractor's needs.

Choose from:

**RL-H3A:** fully automatic self-leveling with 1,150' (350m) operating radius

**RL-H3C:** fully automatic self-leveling with 500' (150m) operating radius

**RL-H3CL:** fully automatic self-leveling with long-range 820' (250m) radius

**RL-H3CS:** fully automatic self-leveling, slope match capability with 500' (150m) operating radius

Your local Authorized Topcon dealer is:

