

# **CONSTRUCTION CATALOGUE**



















# **Topcon Lasers: designed to fit personal needs**

Topcon is a worldwide leading developer and manufacturer of precision positioning equipment and offers a wide selection of innovative Laser, GPS systems, Machine Control solutions and GIS products.

The current laser program is the result of a rich history in the measuring industry, a market driven R&D department and our dedication to provide you with solutions that fit your personal needs.

The Topcon laser range is far ahead of the competition in terms of functionality and quality. Topcon lasers are fast, dependable, durable, and accurate and technologies like Topcon's GreenBeam® make Topcon lasers 4 times more visible than regular lasers. The high quality components used for the production of Topcon measuring tools give us the confidence to offer a warranty period of 5 years, a very strong sales argument.





Topcon understands that in todays demanding work environment every minute downtime on a measuring tool, is a minute lost. That's why we guarantee to solve any problem; swiftly and without restrictions. Buying a Topcon Measuring tool gives you the prospect of at least 5 years of worry-free work. This new catalogue provides an overview of our product range.

It's an easy way to find the measuring tool that best fit your personal needs and budget. No matter what the application, Topcon always offers the right solution. Our goal is to provide you with right business solutions; Today, tomorrow and in the future.

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# **Self-leveling Construction Laser**

RL-H4C series - Horizontal, slope and long range capabilities in one tough package. Its super-fast self-leveling motors are accurate to 1.5 mm per 30 m meaning whether you're checking grade or setting batter boards you're going to be accurate the first time. Its high-power diode means you have a 800 m diameter working radius making it a great reference

for machine mounted receivers. All of these features plus rechargeable battery operation makes the RL-H4C actually offers the functionality of three lasers in one.



RL-H4C

RL-H4C L	ASER		ART. NO
RL-H4C	*1,2,3,4	Horizontal Construction	313650402

- \*1) Handreceiver: LS-80L, 2) Holder for handreceiver,
- 3) Batteries rechargeable, 4) Charger











### LS-80L long range receiver

- Two way communication for height alert and laser battery status
- 5 levels of LCD display precision
- Extended Battery Life
- Quick find sensor
- "SmartClamp" adjustable rod clamp
- Auto shut-off



### RL-H4C Package

- Long range receiver
- Holder for receiver
- Though carrying case
- Charger
- Battery pack

SPECIFICATIONS*	
Instrument	RL-H4C
Beam type / power	red (visible diode) / 2.0 mW (max.)
Operating range (radius)	400 m
Accuracy	2 mm per 30 m
Self-leveling range	±5°
Rotation speed	600rpm
Power	Rechargeable battery
Battery life	approx. 60 hrs
Waterproof	IP66
Dimensions / Weight	177 x 196 x 217 mm / 2,6 kg
Laser Receiver	LS-80L
Grade information channels	11 (+high/low out of range)
On-Grade precision	High precision: ±1 mm, Normal precision: ±2 mm
Audible on-grade alarm	Yes
Power	2 x AA Alkaline batteries
Battery life	Approx. 120 hrs
Auto shut-off	After 30 minutes w/o beam detection



# **Multi-Task Slope Laser**

Rugged dual slope laser with multi-task functionality -When you need a laser for horizontal, single slope, dual slope and vertical applications don't look further. The RL-SV2S high accuracy dual slope laser sets new standards for simplicity. Rugged, lightweight and compact, it's twice the laser at an amazingly affordable price!

The RL-SV2S with vertical function, large backlit highcontrast graphical display and possibilities to change grade, select menu settings, check operational status and even verify battery life, all without touching the laser.



RL-SV2S

SLOPE LASER			ART. NO
RL-SV2S	*1,2,3,4,5	Red Beam	313660402

- \*1) Remote control: RC-60, 2) Hand Receiver: LS-80L, 3) Holder for receiver, 4) Batteries Rechargable, 5) Charger









- RL-SV2S Package
- Long range receiver
- Sensor holder
- Remote control
- New tough carrying case
- Charger



RL-SV2S Package

SPECIFICATIONS*	
Instrument	RL-SV2S
H&V Accuracy	± 2.4 mm per 50 m
Self leveling range	±5 degrees
Grade settings	Dual, ±15%
Operating range (radius)	400 m
Rotating speed	300, 600 rpm
Environment	IP66
Operating time	90 hrs (Alkaline), 55 hrs (Ni-MH)
Operating temperature	–20 to 50°C
Laser class	Class 3R
Output power	2.4 mW
Laser wave length	635 nm
Laser Receiver	LS-80L
Grade information channels	11 (+high/low out of range)
On-Grade precision	High precision: ±1 mm, Normal precision: ±2 mm
Audible on-grade alarm	Yes
Power	2 x AA Alkaline batteries
Battery life	Approx. 120 hrs
Auto shut-off	After 30 minutes w/o beam detection



# **Slope Laser**

The new standard in construction slope lasers - Topcon's RL-200 Series sets new standards for simplicity and accuracy. Rugged, lightweight, and compact, it's twice the laser at an amazingly affordable price!

Choose from two models, RL-200 1S single slope, or 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. When the RL-200 2S is operating, the RC-400 displays all operating information up to 300 m away.



RL-2002S	RC-400 Radio remote

RL-200 SL	OPE LASER		ART. NO	
RL-2001S	*2, 3, 4, 5	Single slope laser	314910462	
RL-2002S	*1, 2, 3, 4, 5	Dual slope laser	314920433	
*1) Remote control: RC-400, 2) Receiver: LS-80L, 3) Batteries Rechargable, 4) Holder for receiver, 5) Charger				









SPECIFICATIONS*	RL-200 1S	RL-200 2S
Repeatability	± 1.2mm	
Horizontal Accuracy	±7 arc seconds	
Grade Range	-5% to +25% (single)	±10%/ –5% to +25% (dual)
Working Range	1100 m	
Wave Length	685 nm visible	
Laser Class	Class 3R	
Environment	IP66	
RC-400 (Remote Control)	Option	Yes
Range		two-way 300 m
LS-80L (Receiver)	Yes	
Receiving Range	1100 m	
Power	2 AA alkalines	







# **Pipe Laser**

The TP-L4 series of alignment lasers offer a combination of features and technology that have proven to meet the demands of contractors more than any other alignment lasers on the market.

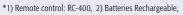
Whether in the trenches, over-the-top, or laser guidance in mining and tunneling, the TP-L4 is the industry standard. Available with red beam and GreenBeam®.

When combined with features like SmartLine® autoalignment, the world's most accurate grade mechanism, power options that keep you working when other lasers have given up, it's no wonder Topcon has set the

There are four TP-L4 models to choose from, which means four ways to get there from here within your budget.



PIPE LASER			ART. NO
TP-L4B	*1, 2, 3	Red Beam	329481211
TP-L4A	*1, 2, 3	Red Beam	399481201
TP-L4BG	*1, 2, 3	GreenBeam®	329481231
TP-L4G	*1, 2, 3	GreenBeam®	329481221



<sup>3)</sup> Target plate

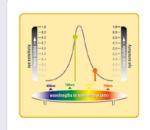




### PIPE LASER

Why Green? - Simple. You can see our GreenBeam® anywhere and under any conditions. It's the most visible construction laser ever!

In fact, the TP-L4G GreenBeam® is four times easier to find in bright sunlight than conventional beams. So setup, grading and pipe installation is fast and easy.



- TP-L4 Package
- 200 mm leg sets
- Carrying case
- Adjustable target
- Remote control RC-200
- NiCad battery
- Battery charger



TP-L4 Package

SPECIFICATIONS*	TP-L4B	TP-L4A	TP-L4BG	TP-L4G
Laser source	633 nm	633 nm	532 nm	532 nm
Beam color	red	red	green	green
SmartLine® auto alignment	no	yes	no	yes
Auto line centering	yes	yes	yes	yes
Auto grade zeroing	yes	yes	yes	yes
Plumb reference	yes	yes	yes	yes
Plumb reference type	LED	LED	LED	LED
SmartLine® operating range	N/A	150 m	N/A	150 m
Grade range	-15% to +40%			
Line range	±15 %			
Horizontal accuracy	± 2.4mm pe	r 50m		
Battery life	DB-53: 70 hrs DB-53: 45 hrs BT-53Q: 48 hrs BT-53Q: 32 hrs			
Housing construction	Cast aluminium			
Laser Class	Class 3R			
Waterproof depth	At least 5 m for 24 hours			
Operating temperature	-20°C to +50°C			



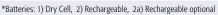
## **Machine Control Laser Receiver**

LS-B100/110 Series – Advanced technology, value-priced laser receivers for dozers, scrapers, excavators, backhoes, and drag-boxes. All LS-B100/LS-B110 receivers feature simple, secure mechanical mounting, 360° beam detection, adjustable on-grade accuracy, water and dust proof cast construction, and bright multi-color LED displays.

Compatible with Topcon's family of Control Boxes for all your earth moving equipment the LS-B110 can also be used in "automatic" mode to hydraulically control the elevation and/or the slope of the cutting edge. This takes production and material savings up to a whole new level.



MACHINE CONTROL LASER RECEIVER ART. N				
LS-B10	*1		312660201	
LS-B10W	*1	(wireless)	312670221	
LS-B100	*2		312670201	
LS-B110	*1, 2a	Vertical indicator	312670211	
LS-B110W	*1, 2a	Vertical indicator (wireless)	312670221	
RD-100W	*1	(wireless)	312671221	







### MACHINE CONTROL LASER RECEIVER

### LS-B10W Handreceiver

The LS-B10W laser receiver delivers a versatile, low cost indicate solution for grade checking and machine control grade applications.

### **RD-100W Remote Display**

Shows the Laser sensors information in the cab of the machine. Productivity increases on the job because the operator focuses on the grade information in the cab.







LS-B110W: On-grade matching and plumb indication



SPECIFICATIONS*	LS-B10	10W	LS-B100	LS-B110	LS-B110W
Detective Range	120 mm		175 mm 250 mm		mm
Detective Angle	270°			360°	
Detective Precision Mode 1: Mode 2: Mode 3: Mode 4:	±2 mm ±6 mm ±12 mm ±30 mm		±3 mm ±6 mm ±15 mm ±30 mm		
Detectable Laser		W	lave Length 63	3 to 785 nm	
Laser Detecting Range		(diame	eter) 800 m (us	ing RL-100 1S/2	S)
Wireless Communication with RD-100W	-	Yes	-	-	Yes
Internal Battery	C-size dry cells 4pcs. Battery pack BT-68Q (sold separately)			)	
External Power Supply	DC 10 V to 30 V -			-	
Operating Time (+20°C) Alkaline dry cells Battery pack BT-68Q	100h	20h	100 hours 50 hours	80 hours 40 hours	40 hours 18 hours
Operating Temperature			-20°C to +	- 50°C	
Water Proof		IP66 (B	ased on the sta	andard IEC6052	9)
Dimensions (W/D/H)	110 x 36 x	( 176 mm	158 x 166	x 357 mm (With	ı clamp)
Weight (Without cells)	< 500 g			2.0 kg	
		RD-100\	N - Remote D	isplay	
Wireless Communication	20 m (may vary depending on obstacles between the two instruments as well as other communication)				
Internal Battery	AA-size o	lry cells 3	pcs.		
Operating time	40 hours				
Dimensions (W/D/H)	110 x 36x 176 mm				
Weight	0,5 kg	0,5 kg			



# X-22 Excavator Grade Control System

The X-22 2D excavator system offers wireless grade control for any excavator. It increases quality and productivity. The system is completely wireless, fast to install, easy to use and flexible to swap between machines. The X-22 simply meets to all of you job site needs , like: flat plane, single slope, dual slope, bucket defined slope, trench, profile etc.

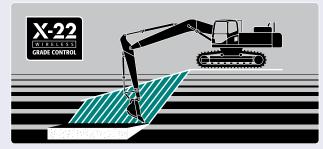


X-22	System
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2D EXCAVATOR	SYSTEM	ART. NO
X-22	X-22 2D System*	5434-2D



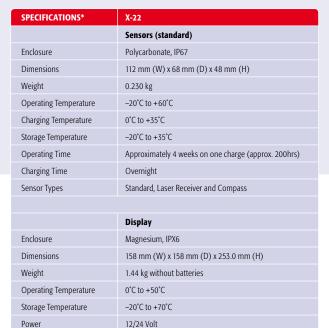




### 2D MACHINE CONTROL SYSTEM













# **Multi Purpose Rotating Laser**

RL-VH4 series – Complete, dependable, durable, accurate, visible and affordable – Compact in design with integrated handle and weighing only 2,6 kg, the RL-VH4DR and RL-VH4G2 are truly portable and easy to set-up.

Now you have the power to work the way you always wanted to work! The new RL-VH4 Multi Purpose lasers offer you

three power options for convenience and flexibility: Alkaline, rechargeable and AC run/charge.

The series provides up to twice as many hours of operation from one set of alkaline batteries as other lasers. Four times more visible with the GreenBeam® version. This is the power you need!



ROTATING LASER		ART. NO
<b>RL-VH4DR</b> *1, 2, 4, 5, 6, 7, 8	Red Beam	313750402
<b>RL-VH4G</b> <sub>2</sub> *1, 3, 4, 5, 6, 7, 8	GreenBeam®	313360402

- \*1) Remote control: RC-40, 2) Detector: LS-80A,
- 3) Detector: LS-80G, 4) Batteries Rechargable, 5) Wall mount,
- 6) Target plate, 7) Charger, 8) Holder for detector

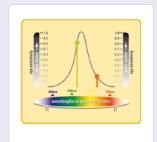




### MULTI PURPOSE ROTATING LASER / CROSSLINE LASER

Why Green? – Simple. You can see our GreenBeam® anywhere and under any conditions. It's the most visible construction laser ever!

In fact, the RL-VH4G2 GreenBeam® is four times easier to find in bright sunlight than conventional beams.



SPECIFICATIONS*	RL-VH4DR	RL-VH4G2
Accuracy	±2mm/20m	±2mm/20m
Detecting range	300 m	300 m
Beam type	635 nm red	532 nm green
Laser Class	3R	3R
Water-dust proof	IP54	IP54
Batteries / Operating time	Rechargeable / 45 hrs	Rechargeable / 24 hrs
Detector	LS-80A	LS-80G



- RL-VH4DR Package
- Magnetic ceiling target
- RC-40 remote control
- Detector
- Holder for receiver
- Rechargeable battery package
- Professional wall mount
- Carrying case



# **Automatic Level / Theodolite**

AT-B2/AT-B3/AT-B4 – Automatic levels – Three choices... limitless applications. One thing in common: Topcon precision. All AT-B series levels feature a finely tuned magnetic damping system with a superior resistance to cold, heat and shock.

Horizontal angles can be directly read in 1° or 1gon units. Free rotation feature allows you to read any angle from zero. 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.



AUTOM	ATIC LEVEL	ART. NO
AT-B2	*1, 2, 3, 4	2110221A0
AT-B3	*1, 2, 3, 4	2110231A0
AT-B4	*1, 2, 3, 4	2110241A0

<sup>\*1)</sup> Carying case, 2) Plumb bob, 3) Lens cleaning cloth, 4) Weather protective bag





### **AUTOMATIC LEVEL / THEODOLITE**

THEODOLITE	ART. NO
DT-209	303216241

\*1) Carring case, 2) Plumb bob, 3) Tool kit, 4) Protective cover



SPECIFICATIONS*	AT-B2	AT-B3	AT-B4
Effective diameter lens	42 mm	36mm	32 mm
Magnification	32 x	28x	24 x
Field of view (at 100 m)	1°20′ (2.3 m)	1°25′ (2.5 m)	1°25′ (2.5 m)
Minimum focus / Horizontal circle	0,2 m / 1°(1g)	0,2 m / 1°(1g)	0,2 m / 1°(1g)
Working Range	±15'	±15'	±15'
Accuracy	0.7 mm	1.5 mm	2.0 mm
Protection against water and dust	IPX6	IPX6	IPX6

DT-209 – Theodolite – With Topcon's DT-209 you'll be up and working fast, thanks to it's 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 ±3 minute angle correction. Only Topcon can offer the precision, durability, and advanced technology found in the DT-209.



SPECIFICATIONS*	DT-209
Minimum focus	90 cm
Minimum reading	2 mgon / 5 mgon
Accuracy	3.0 mgon
Display	1 side LCD
Compensating range	no
Focusing	0,5 m
Water protection	IP66
Operating time	170 hrs



# **Product / application matrix**

Applications					Constr	ruction						Inte	erior				Techni	c			Finis	hing		
		Road Construction	House-building	Warehouse Constr	Landscaping	Piping	Roofer	Slope constructions	Earth Moving	Window/Door	Dry-wall construction	Interior decoration	Kitchen / Bathrooms	Exhibition construction	Stairs	Electricians	Sanitary	Heating / Airco	Tiler	Painter	Plasterer	Prefab construction	Renovation	Decorator
General Construction	Page 3																							
RL-H4C																								
Slope	Page 4-5																							
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RL-200 1S																								
RL-200 2S																								
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AT-B2																								
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DT-209																								



### **About Us**

With over 80 years worth of experience in the manufacture, distribution and support of products, Topcon is well placed to offer comprehensive support to cater for all your needs.

Established in 1932, Topcon today is represented by a workforce of over 6,000. Topcon developes, manufactures, sells, and provides services for a wide range of high technology products for the capture, analysis and presentation of spatial data in the macro, micro and nano worlds.



Investment in research and development leading to innovative new solutions and products is key to the Topcon philosophy and is evident in a number of industry firsts that include the first coaxial EDM Total Stations, the GTS-1 and the unique GPT-7000i series imaging Total Stations incorporating digital cameras. Additionally, Topcon has produced the first and only available mmGPS system, and is the first to offer a true GNSS (Global Navigation Satellite System); dual frequency, dual constellation, GPS plus GLONASS satellite receivers.

Topcon developed inertial sensors to further improve stability with fast blade movements on dozers and motor graders.

Recently Topcon introduced cloud-based management for survey and construction.

















