

# Leica Rugby 600 Series

Your reliable team player on site



**SITE PROOF**  
by Leica Geosystems

# Leica Rugby

## Simple, fast, tough – Select the perfect team player for your site

Leica Rugby lasers are the toughest rotating lasers suitable for all construction applications. Level, align and square much quicker than ever before, eliminating costly errors and downtime.

### Leica Rugby 610



#### One button simplicity

- Simple and reliable, one button laser where no mistakes are possible
- Superb performance with all Leica Rod Eye receivers – extend your working range up to 2,000 feet (600 m) using the Rod Eye 140 Classic and the Rod Eye 160 Digital



### Leica Rugby 620



#### Simple and reliable

- Concrete forming, pad placement and framework levelling; setting foundations and footings has never been more efficient
- Slope matching up to 10% in single axis
- A working range up to 2,600 feet (800 m) with Leica's Rod Eye 140 Classic and the Rod Eye 160 Digital





## Versatility inside and outside

- Fit for any interior and exterior levelling, aligning and squaring application
- Scan 90 – make layout easier by quickly moving the beam to the left or right side
- Plumb Down – automatic and accurate plumb down direction for alignment over a reference point
- Sleep Mode – save battery and put the Leica Rugby into sleep mode without disturbing your set up
- A working range up to 2,000 feet (600 m) with Leica's Rod Eye 140 Classic and the Rod Eye 160 Digital

## Leica Rugby 640



## Slopes done easy

- A great general construction laser with digital grade capability
- Dial-in grade in single or dual axis, easy and fast at the touch of a button
- The unique Smart Slope function continuously monitors time and temperature changes to ensure accurate performance over the course of the day
- A working range up to 2,600 feet (800 m) with Leica's Rod Eye 140 Classic and the Rod Eye 160 Digital

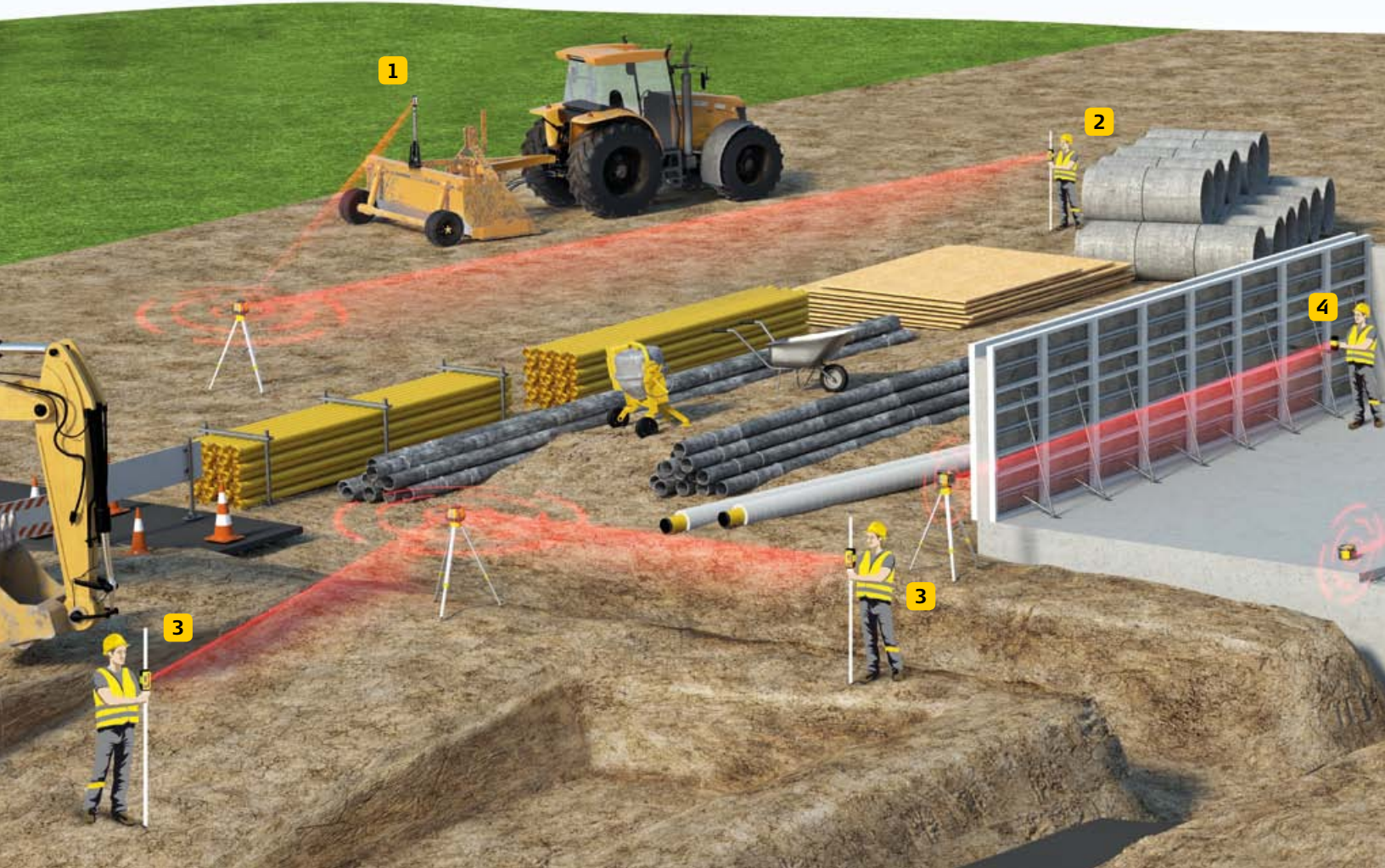
## Leica Rugby 670/680





# Leica Rugby

The right team for every application on site



- 1 Site Preparation**  
Level to grade with dozers, graders, excavators and scrapers



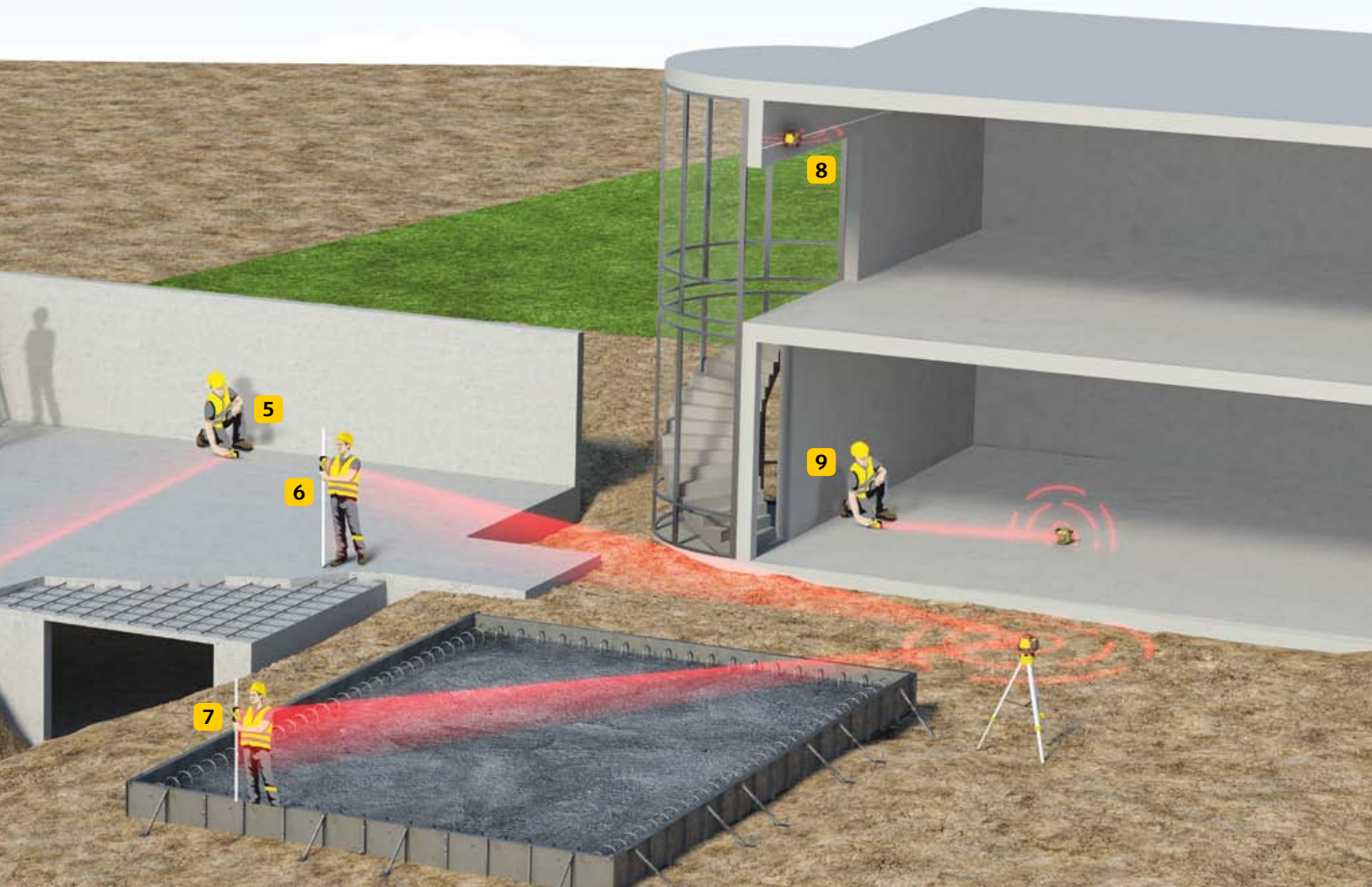
- 3 Slopes for ramps and driveways**  
Dial-in slopes in single (Rugby 670) and dual (Rugby 680) axis



- 2 Grade checking**  
Easy and reliable grade checks.



- 4 Formwork verticality**  
Align parallel to the reference and check plumb of formwork.



**5 Set-out walls**

Align two points and mark position of wall or formwork.



**7 Formwork levelling**

Transfer reference height and level formwork.



**6 Concrete Pouring**

Set concrete forms and check concrete during the pour.



**8 Level ceiling**

Check and level suspended ceiling hangers.



**9 Set-out**

Set-out and mark position of walls.





# Leica Rugby Accessories

The Leica Rod Eye family of receivers and accessories offers solutions for any general construction and interior application. They are engineered to the highest standard and work seamlessly with the Leica Rugby laser portfolio.

## Leica Rod Eye Basic



- **LCD Indication:** two clear displays on the front and back of the receiver
- **Audio Indication:** two settings, high for noisy outdoor jobs and low for indoor applications
- **Automatic Shutoff:** after ten minutes to conserve battery life
- **Grade Rod Bracket:** with integrated level vial ensures your grade rod is plumb and improves the reading accuracy
- **Protective Overmold:** protects the receiver from possible accidents on tough jobsites

## Leica Rod Eye 140 Classic



- Step up with increased capture height and working distance with Leica Rod Eye 140 – with the built-in 12 cm (5") detection window you can easily detect the beam over the entire distance

## Leica Rod Eye 160 Digital



- Professional receiver with digital readout, half millimetre accuracy and strobe rejection
- Capture digital readout for convenient height readings
- Digital readout displays in inches, fractions of an inch, 100ths of a foot, millimeters or centimeters.

## PROTECT by Leica Geosystems






Our products provide the highest levels of reliability, accuracy and ruggedness – even under the roughest jobsite conditions, making our customers more productive and successful. With PROTECT by Leica Geosystems, we offer a best-in-class service where customers can count on us, anytime, anywhere:

- Lifetime manufacturer's warranty
- Certified quality
- No cost period for repair and service
- Swiss technology

The Leica Rugby 600 series come with a 2 year no cost period. Third year free with registration. For more information, please visit our website: [www.leica-geosystems.com/rugby](http://www.leica-geosystems.com/rugby)



# Technical Specifications

					
Technical data	Rugby 610	Rugby 620	Rugby 640	Rugby 670	Rugby 680
Dimensions	212 × 239 × 192 mm (8 3/8" × 9 3/8" × 7 1/16")				
Weight	2.38 kg / 5.2 lbs	2.56 kg / 5.6 lbs	2.56 kg / 5.6 lbs	2.56 kg / 5.6 lbs	2.56 kg / 5.6 lbs
Functionality	Self-levelling horizontal, one button laser	Self-levelling horizontal & manual slope in one axis	Self-levelling horizontal, vertical, 90° and manual slope in dual axis	Self-levelling horizontal, dial-in grade in single axis	Self-levelling horizontal, dial-in grade in dual axis
Product type	General construction	General construction	Multipurpose / H.V.	Semi-auto grade	Semi-auto grade
Laser class	Class 2				
Laser type	635 nm (visible)				
Plumb up	-	-	Yes	-	-
Measured at 20°C (horizontal / vertical)	2.2 mm at 30m (3/32" at 100ft)	±1.5 mm at 30m (1/16" at 100ft)			
Grade range	-	-	-	±8% SG	±8% DG
Smart Slope	-	-	-	Yes	Yes
Rotation - RPS	10	10	0, 2, 5, 10	10	10
Scanning - degrees	-	-	10, 45, 90	-	-
Scan90	-	-	Yes	-	-
Beam down	-	-	Yes	-	-
Sleep mode	-	-	Yes	-	-
Range (diameter) - RE Basic	500 m (1.650 ft)	600 m (2.000 ft)	500 m (1.650 ft)	600 m (2.000 ft)	600 m (2.000 ft)
Range (diameter) - RE140/160	600 m (2.000 ft)	800 m (2.600 ft)	600 m (2.000 ft)	800 m (2.600 ft)	800 m (2.600 ft)
RF remote control (diameter)	-	-	200 m (650 ft)	-	-
Li-Ion batt. / hours operation	40+	40+	40+	40+	40+
Alkaline batt. / hours operation	60+	60+	60+	60+	60+
Working temperature range	-10 to +50°C (14 to +122°F)	-20 to +50°C (-4 to +122°F)	-20 to +50°C (-4 to +122°F)	-20 to +50°C (-4 to +122°F)	-20 to +50°C (-4 to +122°F)
Storage temperature range	-20 to +70°C (-4 to +158°F)	-40 to +70°C (-40 to +158°F)	-40 to +70°C (-40 to +158°F)	-40 to +70°C (-40 to +158°F)	-40 to +70°C (-40 to +158°F)
Seal (both excluding and including battery pack)	IP67	IP67	IP67	IP67	IP67
Warranty	3 years no cost (see PROTECT by Leica Geosystems policy for life time coverage)				

Laser Receivers			
Technical data	Rod Eye Basic	Rod Eye 140 Classic	Rod Eye 160 Digital
Range (diameter) Laser dependent	600 m (2.000 ft)	1.350 m (4.430 ft)	1.350 m (4.430 ft)
Extended detection window	36 mm / 1.4 in	120 mm / 5 in	120 mm / 5 in
Numeric readout height	-	-	90 mm / 3.5 in
Detectable spectrum	600 nm to 800 nm	600 nm to 800 nm	600 nm to 800 nm
Detection accuracies			
Very fine	-	-	± 0.5 mm / ± 0.02 in
Fine	± 1.0 mm / ± 0.04 in	± 1.0 mm / ± 0.04 in	± 1.0 mm / ± 0.04 in
Medium	-	± 2.0 mm / ± 0.08 in	± 2.0 mm / ± 0.08 in
Coarse	± 3.0 mm / ± 0.12 in	± 3.0 mm / ± 0.12 in	± 3.0 mm / ± 0.12 in
Very coarse	-	-	± 5.0 mm / ± 0.20 in

Whether you have to precisely layout a construction site, perform control measurements, collect height and angle data, align concrete forms, install ceilings and partitions, lay gravity flow pipe, locate underground services or complete site preparation and earthworks – Leica Geosystems offers the right instrument, construction laser or machine control installation specifically designed for your construction application.

Easy-to-use, jobsite-tough, accurate and reliable – Leica Geosystems instruments and lasers ensure the efficient use of your materials and resources. High-quality products, such as optical and electronic levels, construction lasers, total stations and machine automation systems, provide fast results, keep you working and increase your profitability.

### When it has to be right.



Illustrations, descriptions and technical data are not binding. All rights reserved.  
Printed in Switzerland – Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2013.  
812720en-us – 12.13 – galledia



**Leica Rugby 800**  
Brochure



**Leica DISTO™**  
Brochure



**Leica Piper 100/200**  
Brochure



**PROTECT by Leica Geosystems**  
Brochure

For more information on Leica Rugby products and services, please visit:  
[www.leica-geosystems.com/rugby](http://www.leica-geosystems.com/rugby)