

Leica Rugby 600 Series

Data sheet



Leica Rugby 600 series rotating lasers are designed to achieve any task in all construction applications. They level, align and square quicker than ever before, eliminating costly errors and downtime. These lasers are built to last on tough construction sites with a durable housing and IP67 protection, making them the most rugged and trusted choice for any job.

- Setting foundations and footings has never been more efficient. The Rugby 600 series is fit for any interior and exterior leveling, aligning and squaring application - concrete forming, pad placement and framework leveling
- Rugby 640G provides outstanding visibility for indoor and outdoor applications with new green beam laser technology
- Rugby 670 and 680 continuously monitor time and temperature changes to ensure accurate performance over the course of the day with the unique Smart Slope function
- Detect the laser beam in any conditions and at any distances with the Leica Rod Eye receiver range - from easy beam detection with Rod Eye Basic to convenient offset readings with Rod Eye 120G/160 and working at long distances with Rod Eye 140/160
- Effortlessly perform slope and plumb applications, move scan lines, change rotating speed, and save on battery power whenever needed (Rugby 640/640G) using the Leica RC 400 remote control with increased functionality and application flexibility

Leica Rugby 600 Series



	Rugby 610	Rugby 620	Rugby 640	Rugby 640G	Rugby 670	Rugby 680
Functionality	Self-leveling horizontal, one button laser	Self-leveling horizontal & manual slope in one axis	Self-leveling horizontal, vertical, 90° and manual slope in dual axis	Self-leveling, horizontal, vertical, 90° and manual slope in dual axis	Self-leveling horizontal, dial-in grade in single axis	Self-leveling horizontal, dial-in grade in dual axis
Laser class	Class 1	Class 1	Class 2		Class 1	Class 1
Laser type	635 nm (red)	635 nm (red)	635 nm (red)	520 nm (green)	635 nm (red)	635 nm (red)
Plumb up	-	-	Yes	Yes	-	-
Accuracy	± 2.2 mm at 30 m (± 3/32" at 100 ft)	± 2.2 mm at 30 m (± 3/32" at 100 ft)	± 2.2 mm at 30 m (± 3/32" at 100 ft)	± 2.2 mm at 30 m (± 3/32" at 100 ft)	± 1.5 mm at 30 m (± 1/16" at 100 ft)	± 1.5 mm at 30 m (± 1/16" at 100 ft)
Self-leveling range	± 5°					
Grade range	-	-	-	-	± 8% SG	± 8% DG
Smart Slope	-	-	-	-	Yes	Yes
Rotation	10 rps	10 rps	0, 2, 5, 10 rps	0, 2, 5, 10 rps	10 rps	10 rps
Scanning	-	-	10, 45, 90°	10, 45, 90°	-	-
Scan90	-	-	Yes	Yes	-	-
Plumb down	-	-	Yes	Yes	-	-
Sleep mode	-	-	Yes	Yes	-	-
Max. range (∅) - RE Basic	500 m (1,650 ft)	800 m (2,600 ft)	400 m (1,300 ft)	-	600 m (2,000 ft)	600 m (2,000 ft)
Max. range (∅) - RE120/120G	800 m (2,600 ft)	800 m (2,600 ft)	500 m (1,650 ft)	400 m (1,300 ft)	900 m (2,950 ft)	900 m (2,950 ft)
Max. range (∅) - RE140/160	1,100 m (3,600 ft)	1,100 m (3,600 ft)	600 m (2,000 ft)	-	1,100 m (3,600 ft)	1,100 m (3,600 ft)
Max. range (∅) - RC400 remote	-	-	200 m (650 ft)	200 m (650 ft)	-	-
Operation time (Li-Ion battery)	40 h					
Operation time (Alkaline battery)	60 h					
Working temperature	-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)	-20 to +50°C (-4 to +122°F)
Protection (with & w/o battery)	IP67					
Warranty	3 years no cost (see PROTECT by Leica Geosystems General Terms & Conditions for details)					



	Rod Eye Basic	Rod Eye 120/120G	Rod Eye 140 Classic	Rod Eye 160 Digital
Max. working diameter	600 m (2,000 ft)	900 m (2,950 ft) / 400 m (1,300 ft)	1,350 m (4,430 ft)	1,350 m (4,430 ft)
Extended detection window	36 mm (1.4 in)	70 mm (2.76 in)	120 mm (5 in)	120 mm (5 in)
Numeric readout height	-	- / 70 mm (2.76 in)	-	90 mm (3.5 in)
DETECTION ACCURACIES				
Very fine	-	-	-	± 0.5 mm (± 0.02 in)
Fine	± 1.0 mm (± 0.04 in)	± 1.00 mm (± 0.04 in)	± 1.0 mm (± 0.04 in)	± 1.0 mm (± 0.04 in)
Medium	-	± 2.00 mm (± 0.08 in)	± 2.0 mm (± 0.08 in)	± 2.0 mm (± 0.08 in)
Coarse	± 3.0 mm (± 0.12 in)	± 3.00 mm (± 0.12 in)	± 3.0 mm (± 0.12 in)	± 3.0 mm (± 0.12 in)
Very coarse	-	-	-	± 5.0 mm (± 0.20 in)
Warranty	1 year	3 years no cost (see PROTECT by Leica Geosystems General Terms & Conditions for details)		

Leica Geosystems AG
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- when it has to be **right**

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