

**SOKKIA****SDG1**  
Dual-Grade Laser***When Reliability Matters, SDG1 is the Right Answer.*****Advanced Technology for Unsurpassed Reliability**

The SDG1 controls the tilt of the rotating axis by constantly monitoring its inclination with a revolutionary encoding system.

This unique technology makes it possible to maintain an accurate laser plane despite variations in environmental factors such as wind, vibration, temperature and direct sunlight.

Leveling repeatability is the highest in the industry: 5 arc seconds.

**Wide Grade and Working Range**

The SDG1 creates a dual-grade plane ranging from -10% to +10% in the X axis and from -5% to +25% in the Y axis.

In combination with the LR200 standard detector, the SDG1 provides a working range of 800 m (2,620 ft.) in diameter.



# SDG1

## Dual-Grade Laser

### Easy-to-Use Functions for Maximum Productivity

#### Compact yet Rugged Body

The compact and lightweight design makes the SDG1 easy to carry.

The IP66 dust/water-resistant housing protects against powder dust and sudden showers.

#### Easy Operation

The X and Y grades can be easily set with up/down and left/right buttons while viewing the large-digit LCD screen.

Menu icons facilitate instrument setup.



#### Full Wireless Control

The LRC6 standard remote controller has exactly the same display and keys as the SDG1. This means all operations and settings can be performed wirelessly.

Remote control range is 300m (1,000ft.). 9 radio channels are selectable to avoid interference with other devices.



#### Numerous Convenient Functions

Masking: an electronic shutter limits laser radiation by 90°, 180° or 270° to avoid interference.

Windy: increases stability in unsteady and windy conditions.

HI Alert: lets you know when the instrument is tilted or jarred.

#### Advanced Laser Detector

The LR200 standard detector has LCD displays on both faces.

3-color LEDs make it easy to find the laser beam at a distance.

Advanced functions: displays HI Alert and battery level information from the SDG1.



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#### SDG1 Specifications

Repeatability	±5 arc seconds
Horizontal accuracy	±10 arc seconds
Grade range X	-10 to +10% (unit: 0.001% increments)
Y	-5 to +25% (unit: 0.001% increments)
Typical working range	2 to 800m (6 to 2,620 ft.) in diameter
Rotation speed	300 / 600 / 900 rpm, selectable
Light source / Wavelength	Laser Diode / 690nm (visible)
Laser class	CDRH (FDA): Class IIIa / IEC: Class 3R
Self-leveling range	±5° (at 0% grade setting)
Dust and water protection	IP66 (IEC 60529:2001)
Operating temperature	-20 to +50°C (-4 to +122°F)
Continuous use	With standard Ni-MH battery: Approx. 80 hours With four D (R20) size alkaline batteries*: Approx. 85 hours
Size	W 218 x D 174 x H 253 mm (W 8.6 x D 6.9 x H 10.0 in.)
Weight (w/battery)	Approx. 3.6 kg (7.9 lb.)

\* An optional battery pack required.

#### LRC6 Remote Controller Specifications

Communication range	Approx. 300m (1,000 ft.)
Radio	2.4GHz two-way communications with 9 channels
Battery	Three AA (R6) alkaline batteries

#### LR200 Detector Specifications

Display	LCD on both faces
LED indicator	Top: Orange, center: Green, bottom: Red
Detection sensitivity	H: ±0.5mm (±0.02in.) L: ±2.0mm (±0.08in.)
SDG1 status display	"HI Alert" and "Battery level"
Battery	Two AA (R6) alkaline batteries (100 hours continuous use)

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