SOKKIA

MADE TO FIT YOUR WORLD.

SDL30/SDL50
Digital Levels

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Make measurements quick, easy, and accurate

The SDL30/SDL50 is an accurate, dependable digital level that combines user-friendly convenience with maximum functionality.

All you have to do is aim the staff, adjust the focus, and then with a single touch of a key the SDL30/SDL50 accurately measures height and distance. The results are easy to see on the LCD display.

- High-speed measurement
- Consistent performance
- Water and shock resistant
- 2000-point internal memory
- Li-ion power system for up to 8.5 hours of continuous operation

Fast measurements

Aim, focus and press a key. Height and distance are simultaneously measured in 2.5 seconds, 20 percent faster than ordinary digital levels.

Reliability you can count on

You get superior measurement capability under all conditions. Even when the staff surface is partially shaded, or in dim light where the brightness at staff surface is as low as 20 lux*, the SDL30/SDL50 consistently provides accurate measurements without downtime.

*   20 lux is defined as the minimum brightness with which human face can be recognized.

Automatic recognition of inverted staff

The SDL30/SDL50 automatically recognizes directions of RAB-Code staffs and displays the results with a minus sign (-) when the staff is inverted. Height of ceiling, overpasses, bridges, road signs, tree branches, tunnel crowns, and other objects can be easily measured without a calculator.

Wave-and-Read technology

The innovative "Wave-and-Read" technology provides an additional survey style. The SDL30/SDL50 tracks the RAB-Code staff waved back and forth to read the correct height. The staff reading becomes the minimum when it is in vertical position. The SDL30/SDL50 automatically detects the least value of staff readings.

Choose your accuracy

SDL30: 0.4 mm (Super-Invar Staff) / 0.6 mm (Invar) / 1.0 mm (Fiberglass)

SDL50: 0.6 mm (Super-Invar Staff) / 0.8 mm (Invar) / 1.5 mm (Fiberglass)

Choose the digital level and staffs according to the accuracy* you need. Sokkia offers the top-of-the-line SDL1X model for higher accuracy of up to 0.2 mm.

*   1 km double-run leveling

Robust internal memory

Up to 2,000 measurements of elevation or height differences can be recorded in the internal memory. Auto mode records data as soon as the measurement is taken, while manual mode allows you to check the measurement results before recording. Stored data is easily exported using the "Spectrum Link" software.
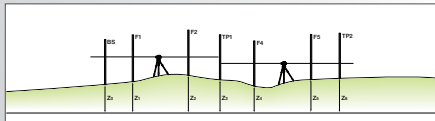
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Convenient on-board programs

The on-board measurement programs of SDL30/SDL50 facilitate leveling and setting-out tasks. Programs include:

- Elevation
- Height Difference
- Cut and Fill Setting-out
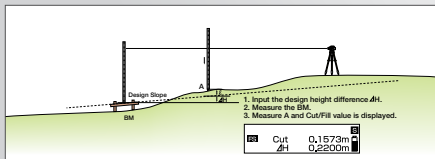- Setting-out in Distance

Elevation/Height difference

- The SDL30/SDL50 calculates height difference between backsight (BS) and foresight (FS)
- Elevation of foresight can be calculated by inputting BS elevation

Cut and Fill Setting-out

- Slope can be set using Cut and Fill Setting-out program
- Leveling is possible by inputting the height difference zero (0)

Specifications

Model			SDL30	SDL50
Height accuracy (ISO 17123-2)*	Electronic	BIS30A staff	0.4 mm (0.016 in.)	0.6 mm (0.024 in.)
		BIS20/30 staffs	0.6 mm (0.024in.)	0.8 mm (0.03 in.)
		BGS staffs	1.0 mm (0.04 in.)	1.5 mm (0.06 in.)
	Visual	BGS staffs	1.0 mm (0.04 in.)	2.0 mm (0.08 in.)
Distance accuracy (D: measuring distance)	Electronic		<±10 mm (±0.4 in.) [D<=10 m (D<=33 ft.)] <±0.1% x D [10<D<=50 m (33<D<=164 ft.)] <±0.2% x D [50<D<=100 m (164<D<=328 ft.)]	
Measuring range	Electronic		1.6 to 100 m (5.3 to 328 ft.)	
	Visual		from 1.5 m (5 ft.)	
Measuring mode			Single / Repeat / Average / Tracking / Wave-and-Read	
Display resolution	Height		0.0001/0.001/0.01 m (0.001/0.01/1 ft., 1/8 in.)	
	Distance		0.01/0.1 m (0.1/1 ft., 1 in.)	
Measuring time	Single / Repeat		<2.5 s	
	Average		<2.5 s x [number of measurements]	
	Tracking		<1 s	
Minimum brightness condition			20 lux at the surface of staff (with natural light)	
Telescope	Objective aperture		45 mm (1.8 in.)	36 mm (1.4 in.)
	Magnification / Resolving power		32x / 3"	28x / 3.5"
	Minimum focus / Field of view		1.5 m (5 ft.) / 1°20′	
Compensator	Type		Pendulum compensator with magnetic damping system	
	Working range		±15′	
Sensitivity of circular level			10′/2 mm	
Horizontal circle			Diameter: 103 mm (4 in.) Graduation: 1° (1gon)	
Display			Dot matrix LCD (128 x 32 dot) with illuminator	
Keyboard			8 keys (7 keys on front panel, 1 key on side panel)	
Data storage			2,000 points internal memory	
Interface			RS-232C, baud rate 1,200 to 38,400bps	
On-board programs			Elevation / Height difference / Cut and Fill Setting-out / Setting-out distance / Height measurement	
Water resistance			IPX4 (IEC60529:2001)	
Operating temperature			-20 to 50°C (-4 to 122°F)	
Size (w x d x h)			158 x 257 x 182 mm (6.2 x 10.1 x 7.2 in.)	
Weight with battery			2.4 kg (5.3 lb.)	
Standard battery			BDC46B (Rechargeable Li-ion, 7.2V, 2.45Ah)	
Operating time			Approx. 16 hours at 25°C (77°F)	

Standard deviation for 1 km double-run leveling

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Your local Authorized Dealer is:

TOPO TRADE

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