

**SOKKIA**

**B21**

**AUTOMATIC LEVEL**

IEC529  
IPX4

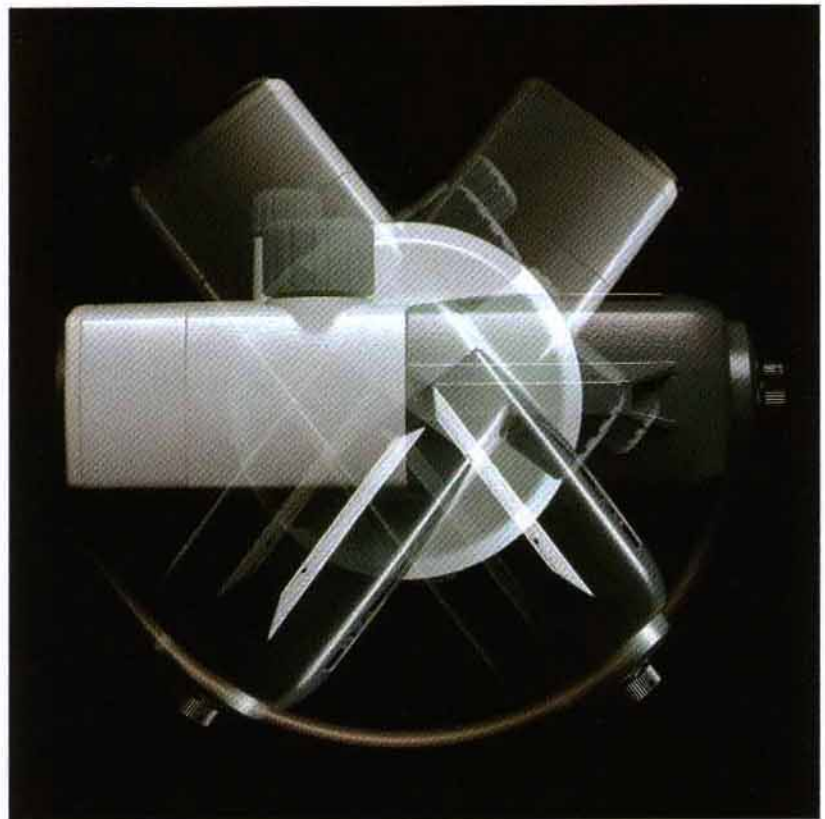
**30x Telescope Magnification**  
**1.5mm Standard Deviation for 1km Double-run Levelling**



# A New Level of Accuracy Compactness, Reliability and Ruggedness

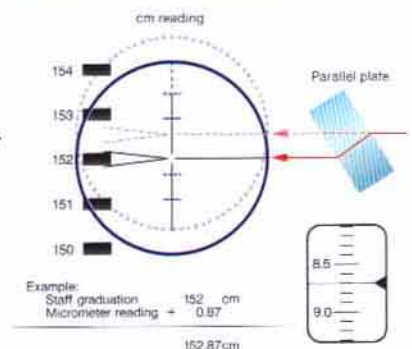
The automatic level from Sokkia offers the best of our famed levelling technology in a more compact, easy-to-use design. Tougher, smaller, and more tightly sealed against humidity and dust — for superior performance whatever the conditions. Better yet, this latest model is just as quick and easy to set up, simple to sight, and immune to vibration, shock, and other environmental conditions.

Fully resistant to rain and accidental dousings, it won't fog even with sudden temperature changes — leaving you free to concentrate on the work. This model meets JIS grade 4 specification for waterproofing. (This complies with International Electrotechnical Commission Standard, Class IPX4.)



## Precise Levelling

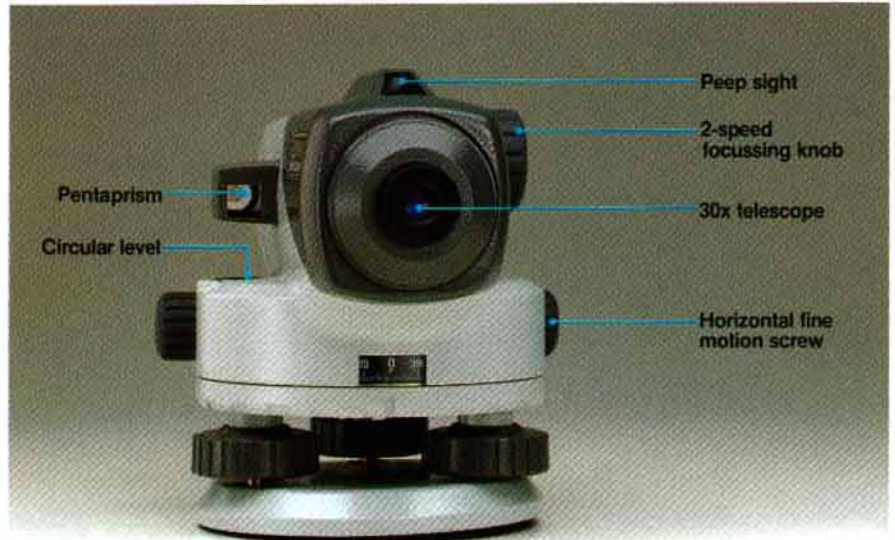
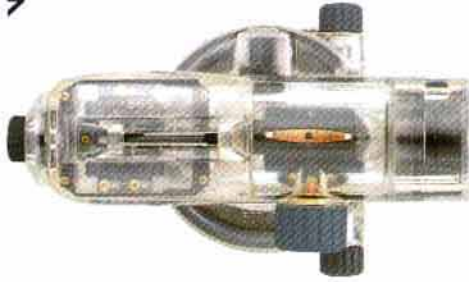
The reticle can be fitted with the optional parallel plate micrometer for precise measurement in increments of 0.1mm (estimation 0.01mm).



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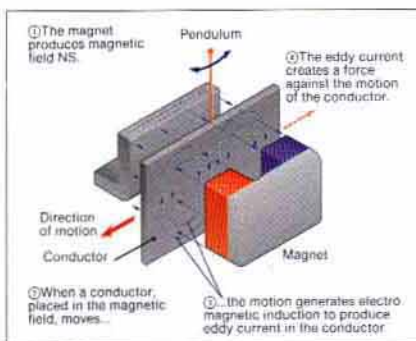
# B21

## AUTOMATIC LEVEL



### Rapid, Easy Set-Up

Using a spherical head tripod, setting up the level is fast and easy even on angled, uneven surfaces. Set the level onto the tripod head, centre the circular bubble, and away you go. It also fits flat head tripods.



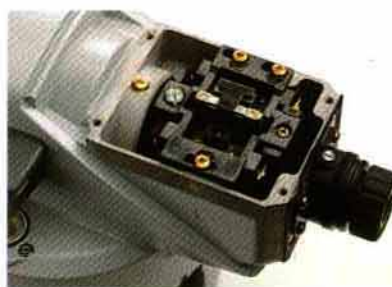
### Reliable Automatic Compensator

Four suspension wires and magnetic damping action ensure stability, even under rapidly changing atmospheric conditions, vibration, and shock. Extended compensator range of  $\pm 15$  minutes.

### Precise Collimation

This model incorporates an endless horizontal motion drive with two knobs for fast and easy aiming, operable with the right or

left hand. Simply turn the instrument, then use the fine motion to precisely aim the level at the target. Two-speed focus knob switches between coarse and fine focussing for even faster operation. The 30x telescope's optics are bright and clear. The 30cm (1ft) minimum focus distance (from the centre of the instrument) makes it easy to use in confined locations.



### Convenient Horizontal Angle Measurement

This model is equipped with an easy-to-use horizontal circle for



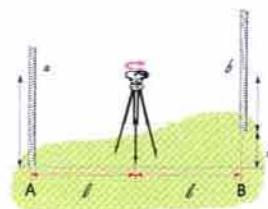
laying off and measuring angles (direct reading to  $1^\circ$  or 1gon). The readout window is conveniently located on the instrument base—directly below the eyepiece.

### Easy to Adjust

Reticle adjustment is made with one screw. Circular level vial is adjusted with two screws. Both adjustments are simple and fast with provided tools.

### Stadia

The stadia wires on the reticle allow easy calculations of distance. Simply multiply the distance on the rod between the top and bottom stadia lines by 100.



## B2<sub>1</sub> Specifications

| <b>Telescope</b>  |   |
|---|---|
| Length  | 215mm (8.5in)                                       |
| Objective aperture  | 42mm (1.7in)  |
| Magnification   | 30x   |
| Image   | Erect   |
| Resolving power   | 3"  |
| Field of view (at 100m)   | 1°20' (2.3m)  |
| Minimum focussing distance  | 0.3m (1.0ft)  |
| Reticle   | Wedge shape   |
| Stadia multiplication constant  | 100   |
| Stadia additive constant (cm)   | 0   |
| Reticle illumination  | by LA8 (optional)                                   |
| Two-speed focus   | Standard  |
| Sunshade  | Standard  |
| <b>Compensator, Automatic Level Mechanism</b>   |   |
| Damping system  | Magnetic  |
| Working range   | ±15'  |
| Setting accuracy  | 0.5"  |
| <b>Parallel Plate Micrometer</b>  |   |
| Device  | OM5 (Metric, optional)<br>OM5F (Imperial, optional) |
| Range   | 10mm (0.01ft)                                       |
| Division  | 0.1mm (0.001ft)                                     |
| Estimation  | 0.01mm (0.0001ft)                                   |
| <b>Levelling Accuracy</b>   |   |
| Standard deviation for 1km (1mile) double-run levelling   |   |
| Without micrometer  | 1.5mm (0.006ft)                                     |
| With micrometer   | 1.2mm (0.005ft)                                     |
| <b>Horizontal Circle</b>  |   |
| Aluminium, clockwise  |   |
| Diameter  | 103mm (4.1in)                                       |
| Graduation  | 1° (1gon)   |
| Estimation  | 0.1° (0.1gon)                                       |
| <b>Water Resistance</b>   |   |
| This model meets Japanese Industrial Standard, Class IPX4 (JISC0920). This complies with International Electrotechnical Commission Standard, Class IPX4 (IEC529). |   |
| <b>General</b>  |   |
| Sensitivity of circular level   | 10'/2mm   |
| Mirror for circular level   | Pentaprism  |
| Horizontal fine motion  | Double-sided endless drive                          |
| Size (W×D×H)  | 130 × 215 × 135mm<br>(5.1 × 8.5 × 5.3in)            |
| Weight (instrument)   | 1.85kg (4.1lbs)                                     |
| (case)  | 2.0kg (4.4lbs)                                      |
| Base  | Concave and flat                                    |
| Base screw  | φ5/8"   |

Specifications are subject to change without notice.

## Options

### DE22 Diagonal Eyepiece

A diagonal eyepiece facilitates work in tight spots with little space behind the instrument.

### LA8 Reticle Illumination Unit

Illumination unit makes it possible to keep working under low-light conditions. A light-emitting diode illuminates the crosshairs.

### OM5 Parallel Plate Micrometer

For precise measurement. Available in metric or imperial models.



DE22



OM5



LA8

## Standard Equipment

Instrument, lens cap, plumb bob, vinyl cover, tool kit, operation manual, and carrying case.

## SOKKIA CO.,LTD.

ISO9001 Certified (JQA-0557)

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