

SET60 Series SET62/SET65

SPECIFICATIONS

Total Station

Model	SET62	SET65
Telescope		
Magnification	30x	
Resolving power	3.0"	
Length: 150mm, Objective aperture: 45mm (50mm for EDM), Image: Erect, Field of view: 1°30' (26m/1,000m), Minimum focus: 1.3m		
Angle measurement		
Display resolutions (selectable)	1" / 5" (0.0002 / 0.001gon)	
Accuracy (ISO 17123-3:2001)	2"	5"
Method	Absolute rotary encoder scanning	
Detecting system	Horizontal	2 sides
	Vertical	1 side
Compensator	Dual-axis liquid tilt sensor, working range: ±3', Correction unit: 1"	
Distance measurement		
Measuring range	Mini prism	900m (3,000ft.)
(under average conditions ^{*1})	One prism	2,000m (6,600ft.) / Under good conditions ^{*2} : 2,300m (7,500ft.)
	Three prisms	2,700m (8,900ft.) / Under good conditions ^{*2} : 3,100m (10,200ft.)
Accuracy (D=measuring distance in mm)	±(2mm + 2ppm x D)m.s.e.	
Least count in measurement	Fine: 1mm (0.005ft.) / 0.2mm (0.001ft.), Coarse: 10mm (0.02ft.) / 1mm (0.005ft.) Tracking: 10mm (0.02ft.)	
Measurement time ^{*3}	Fine: 1mm: 1.2s (Initial 4s) / 0.2mm: 2.8s (Initial 5s), Coarse: 0.7s (Initial 3s) Tracking: 0.4s (Initial 3s)	
Interface and Data management		
Display	Graphics LCD, 160 × 64dots	
Keyboard	Alphanumeric 24keys	
Control panel location	On both faces	
Data storage	Internal memory	24,000pts.
Interface	RS-232C	
General		
Levels	Circular level	10' / 2mm
	Plate level	30" / 2mm
Optical plummet telescope	Magnification: 3x, Focusing range: 0.5m to infinity, Image: Erect	
Dust and water protection (With BT-G1S)	IP54 (IEC 60529)	
Operating temperature	-20 to +50°C (-4 to 122°F)	
Size / Instrument height	W184 x D172 x H336mm (W7.2 x D6.8 x H13.2in.) / 176mm (6.93in.) from the tribrach dish	
Weight	Instrument with battery	4.9kg (10.8lbs)
	Plastic carrying case	3.4kg (7.5lbs), Weight of the carrying case may be slightly different due to specific market.
Power supply		
Battery (BT-G1S)	Operating time (Fine mode)	Approx. 27 hours (Single distance measurement every 30 seconds at +20°C / +68°F ^{*4}) Approx. 9 hours (Continuous distance measurement at +20°C / +68°F)
Battery charger	Recharging time	1.8 hours (+10 to +40°C)

*1 Average conditions: Slight haze with visibility about 20km (12.5 miles) moderate sunlight with light heat shimmer.

*2 Good conditions: No haze with visibility about 40km (25 miles), overcast with no heat shimmer.

*3 The initial time will be different by a condition and setting EDM off time.

*4 On the condition EDM off time is set at 0 minutes.

Standard Accessories

- Main unit x 1 ● Battery(BT-G1S) x 1 ● Battery charger x 1 ● Lens cap x 1 ● Tool kit with case x 1
- Plastic rain cover x 1 ● Silicon cloth x 1 ● Carrying case x 1



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Your local Authorized Dealer is:

SOKKIA

SET60 Series

Total Station

Outstanding Performance and Versatile Functions

- Superior Waterproof and Dustproof
- High Accuracy & Long Measuring Range
- Enhanced Absolute Encoder
- Versatile Application Programs
- Dual-Axis Tilt Sensor



Outstanding Performance and Versatile Functions

Clear and bright telescope
Magnification: 30x
Minimum focus: 1.3m

Detachable handle ergonomically designed for easy gripping

Instrument center mark

Rough but quick capture of prism by sighting collimator

Telescope grip that enables subtle adjustment

Optical plummet
Magnification: 3x

Lock and fine adjustment tangent screw

Circular level for easy check

Data exchange with PC via RS-232C port

Precise leveling by a highly sensitive plate level

Easy viewing displays with 4-line, 20-character, with backlight and heater on both faces

Easy-to-use 10-key pads with alphabet entry on both faces

Integrated tribrach with quick lock/ release feature

Extra-large memory capacity for 24,000 points

SET60 Series store the measured data up to 24,000 points.



Rechargeable Battery (BT-G1S)

Superior Waterproof and Dustproof

SET60 series conform to IEC Standard IP54. No worry about sudden bad weather.

Protection against ingress of solid foreign objects
Highest level: 6
7 levels: 0 to 6.
X: unspecified.

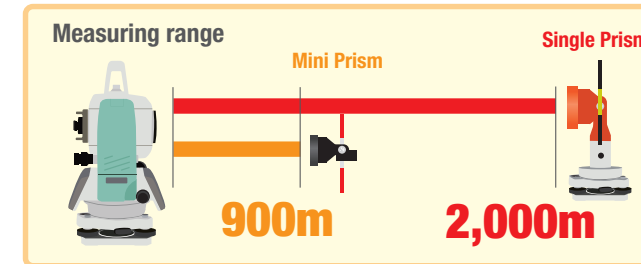


Protection against ingress of water
Highest level: 8
9 levels: 0 to 8.
X: unspecified.

The International Electrotechnical Commission standard IEC 60529 describes a system for classifying degrees of protection provided by enclosures of electrical equipment. The IP Code consists of the letters IP and two numerals. Larger numbers represent greater levels of protection.

High Accuracy & Long Measuring Range

- High accuracy: $\pm(2\text{mm} + 2\text{ppm} \times D)$ m.s.e.
- Long distance: 2,000m with a Single Prism.

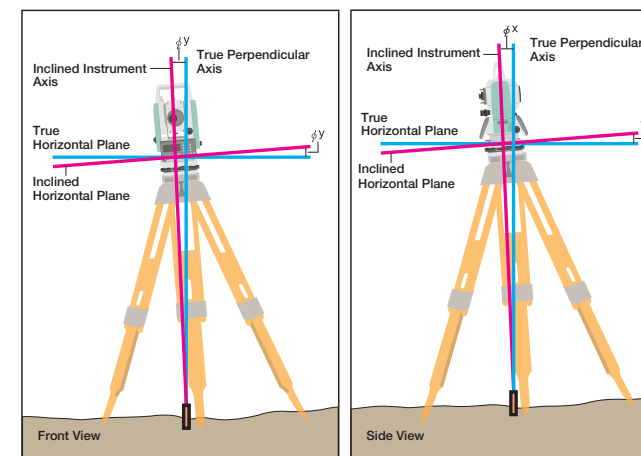


Enhanced Absolute Encoder

SET60 Series adopted an absolute encoder system, which doesn't require 0 set and realizes stable measurement with less reading error.

Dual-axis tilt sensor

The dual-axis tilt sensor monitors inclination of both X and Y axes, and correct horizontal and vertical angle readings automatically.

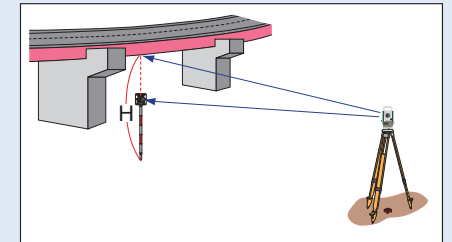


Versatile Application Functions

On-board data collection, Survey, Layout, Road Calculation, and many more functions.

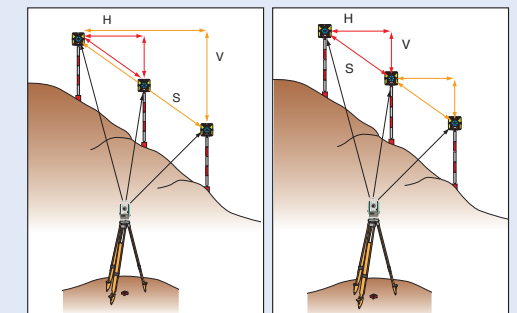
Remote Elevation Measurement (R.E.M.)

To easily determine the height of a point where a prism cannot be placed. Take a distance to a prism placed either directly above or directly below the target point, then sight to the target point.



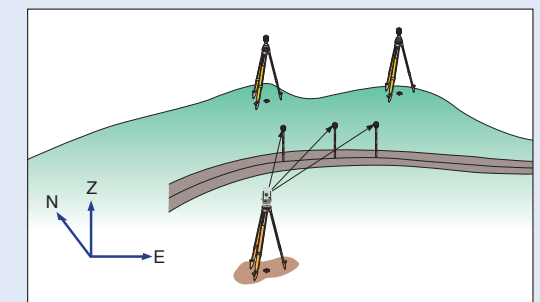
Missing Line Measurement (M.L.M.)

To measure horizontal distance, slope distance and height difference between two prisms.



Layout

Layout function for coordinate measurement and control stakeout and resection measurements.



Road

Road function automatically calculates parameters of a complicated spiral curve and a long distance route simply by defining the start point, end point and curve elements.

