

TELESCOPE	AT-G1	AT-G2	AT-G3	AT-G4	AT-G7N
Length (mm)	229	229	230	192	192
Image	Erect	Erect	Erect	Erect	Erect
Magnification	32x	32x	30x	26x	22x
Objective lens (mm)	45	45	40	30	30
Relative brightness	1.98	1.98	1.78	1.33	1.86
Field of view	1°20'	1°20'	1°30'	1°30'	1°30'
Resolving power	2.5"	2.5"	3.0"	3.5"	4.0"
Minimum focus (m)	1.0	1.0	0.5	0.5	0.5
Stadia constant (m)	0	0	0	0	0
Stadia ratio	100	100	100	100	100
CIRCULAR LEVEL					
Sensitivity (/2mm)	8'	8'	8'	8'	10'
AUTOMATIC LEVELLING					
Setting accuracy	±0.3"	±0.3"	±0.3"	±0.3"	±0.5"
Compensating range	±15'	±15'	±15'	±15'	±10'
ACCURACY (1KM DOUBLE RUN LEVELLING)					
Without optical micrometer (mm)	±0.7	±0.7	±1.5	±2.0	±2.5
With optical micrometer (mm)	±0.4	±0.4	±1.0	-	-
HORIZONTAL CIRCLE					
Diameter (mm)	90	117	117	117	117
Minimum division	10'(0.1g)	1°(1g)	1°(1g)	1°(1g)	1°(1g)
WEIGHT					
Instrument (kg)	2.1	1.8	1.8	1.6	1.6
Plastic carrying case (kg)	1.3	1.3	1.3	1.3	1.3

Designs and specifications herein are subject to change without notice.

More than 70 years of experience

For 70 years, Topcon has been a leading manufacturer in industrial, medical and positioning enhancement tools. This broad experience has created a basis for Topcon's wide product line for basically every positioning need, whether it's for construction or surveying applications. For the construction industry, Topcon offers a complete range of innovative laser and sonic solutions, including industry leading products for interior, utility, general construction and machine control applications. For surveying applications, Topcon manufactures and supplies a complete range of optical measuring products, from digital and optical levels to theodolites and robotic total stations, and a full line of GPS+ satellite positioning solutions.

Product & Service support

To assure that your Topcon product maintains peak performance, your local Topcon dealer offers factory trained certified service technicians. And just in case service assistance isn't available in your area, our Europe wide network of Topcon offices, offer repair and return service policies second to none.

Innovation, not imitation

During the last decades, Topcon has brought many innovative solutions to the industry, that offer the contractor significant productivity increase and greater ease of use. That's the key to leadership, and the reason Topcon is the world's leading supplier of laser and surveying instruments. Some examples of unique Topcon technologies:

- Waterproof auto level
- The integrated total station, "The Guppy"
- The compact coaxial total station (GTS-1)
- World's First laser with beam scanning technology
- The first waterproof total station
- GreenBeam® visible construction lasers
- Automatic excavator control system
- World's First 3-D machine control (3D- MC™ LPS)
- 5" Grade laser with automatic alignment & remote control
- Horizontal self leveling laser with liquid compensator
- First robotic total station with instant beam lock system (GTS-800A and RC-2)
- First satellite-directed automatic 3D machine control system (3D-MC™ GPS)



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AT-G SERIES

***AUTOMATIC
LEVELS***

Surveying and engineering automatic levels



Topcon offers a complete range of surveying, engineering and construction levels designed and built for reliable performance. The compact, lightweight, rugged construction ensures perfect suitability for the whole range of levelling tasks.

Features

Waterproof sealed telescope construction

The AT-G series have a completely waterproof telescope and are therefore ideal for all kinds of levelling work, even in wet conditions, in rain or in tunnels. Only test-approved telescopes are used and dry nitrogen gas is sealed in the telescope tube. This effectively prevents lens clouding and moisture condensation. The AT-G series automatic levels are all water sealed to IPX-7, offering the maximum water protection.

Angular reading to 10 minutes (AT-G1)

The model AT-G1 has a glass horizontal circle which is graduated in 10 minute divisions (10c divisions) and numbered every degree (one grade) with calibrations from 0° to 360° (0g to 400g). Furthermore, readings are possible through a 25x reading microscope, with only a slight shift of the eye, from the telescope eyepiece. The horizontal circle freely rotates for zero alignment.

2 speed focussing (AT-G1)

Fine and coarse focussing is provided by a coaxial focussing knob, which permits both rapid setting and accurate focussing for a perfect image.



New ergonomic design

Redesigned for smoother, easier operation all around, Topcon's AT-G series offers a larger knob for faster, accurate adjustments and new materials for lightweight when on the move.

Clampless fine horizontal adjustments

Fine horizontal adjustments are possible at any point through 360° (400g), without clamping action. This means that target alignments are greatly speeded up. Furthermore, fine horizontal knobs are available on both sides for very easy and speedy adjustments.

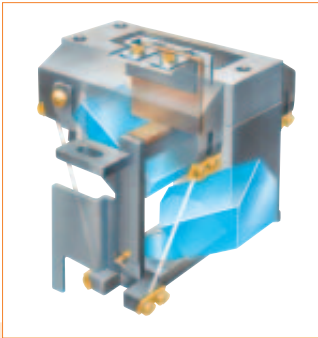
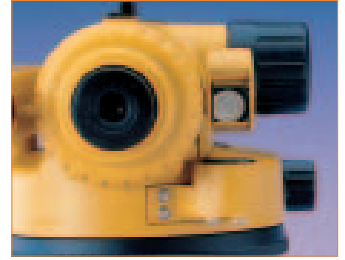


Very short 0.5 meter focussing (AT-G3/G4/G7N)

AT-G3/G4/G7N have a short range setting position of 0.5 meter that is especially suitable for close range work carried out by builders and contractors.

Easy-to-see circular level observation

The circular level is checked very easily with a slight shift of the eye. There is a clear distinct view observed via reflecting pentagonal mirror (AT-G1/G2/G3) or a hinged mirror (AT-G4/G7N).



Rapid, stable automatic levelling

A time-proven magnetically damped compensator is incorporated for automatic levelling action. It is not affected by fine vibrations and has been proven to have very stable precision, thus speeding up automatic levelling operations and producing accurate results. The Topcon-exclusive automatic levelling system utilises four special mylar ribbons for hanging the magnetic damper compensator. The compensator is therefore not influenced by the magnetic field, as well as having superior resistance to cold, heat and shock.

Rubber eyepiece cap

Sighting through Topcon's AT-G series is safe for anyone who wears eyeglasses. With their protective rubber eyepiece caps, scratches and abrasions are reduced or eliminated completely.

Fast instrument set-up

Very fast instrument set-up is possible using a dome head tripod. The base plate is specially shaped for fixing on top of dome head tripods.

Optional accessories

Diagonal eyepieces (AT-G1/G2/G3)

By using the diagonal eyepiece in place of the standard telescope eyepiece, easier viewing is possible with low set-up positions or in confined spaces.



40x eyepiece (AT-G1/G2)

Increases magnification of the telescope of the AT-G series from 32x to 40x for even more precise levelling.

Illuminator-5 (AT-G1/G2/G3)

Provides light to the telescope reticle when available light is insufficient, for example in tunnels or at night.



Optical micrometer (AT-G1/G2/G3)

Get greater accuracy from AT-G series auto levels using the optical micrometer. In one kilometre of double run levelling, accuracy is improved to $\pm 0.4\text{mm}$. The optical micrometer attaches to front of objective lens with a counter weight attached to the eyepiece.



Centering platform

When used on top of a tripod the centering platform provides quick and simple centering on reference points. Parallel shifts of 100mm vertically and 30mm laterally.

