

GP1X·GP2X GP3X·GP5X GYRO STATION

Determine Azimuth Anywhere, Anytime

The GYRO STATION locates true north and determines azimuth without any other aid. Ideal for surveying and engineering applications where no known station is available.

Applications

- Directional controls for tunnelling
- Setting-out in underground constructions
- Roads, Railroads, Power lines, Pipelines and similar long and narrow construction projects

Set the Azimuth and Start Surveying

This Unique Instrument Provides Superior Solutions Beyond the Reach of Other Technologies

20" Azimuth Accuracy

The GYRO STATION incorporates the GP1 manual gyroscope mounted on the SET X total station. It can locate true north and determine the azimuth with 20" (6 mgon / 0.1 mil) precision within 20 minutes.

Comparison with Other Solutions

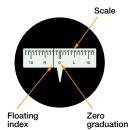
	Restriction by Location	Restriction by Weather	Restriction by Hour	Accuracy	Speed
GYRO STATION	None	None	None	High	Fast
RTK-GPS/GNSS	Yes	None	None	High	Fast
GPS/GNSS Static	Yes	None	None	High	Slow
Total Station	Yes	Yes	Yes	High	Slow
Astronomical	Yes	Yes	Yes	High	Slow
Magnetic Compass	None	None	None	Low	Fast

Two Modes for Seeking True North

Observe the precession of the "floating index" through the GP1's eyepiece. The following two measurement modes are available.

• Follow-up Measurement

Rotate the SET X horizontally to keep the floating index at the zero (0) graduation. At the turning point of precession, just press a key on the SET X or the DLC1 remote trigger. With two or more turning points, the azimuth is automatically calculated.



• Time Measurement

Make a provisional determination of true north within a precision of $\pm 20^{\circ}$ (0.37gon, 6mil) using Follow-up Measurement or a magnetic compass. Press a key each time the floating index crosses the zero graduation.

DLC1 Remote Trigger

Simple 3-key remote trigger facilitates Enter key operation during gyro measurement procedures. It also allows distance measurement to be triggered wirelessly.



SET X Total Stations

These total stations implement the gyro calculation program. The red laser beam of its reflectorless EDM can be utilized as a directional reference for tunnel excavation, a pointer for settingout, etc. Four models of differing angle accuracy levels are available.

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Specifications

-							
GP1 Gyroscop	be						
Accuracy of azimuth determination		20"/6mgon/0.1mil (standard deviation)					
Running-up time		Approx. 60 seconds					
Half period (at middle latitudes)		Approx. 3 minutes					
Minimum interval between main divisions		Approx. 10' (0.185gon, 3mil)/div					
Operating temperature		-20 to +50°C (-4 to+122°F)					
Operating area		Up to 75° latitude					
Size		W145 x D186 x H416mm (W5.7 x D7.3 x H16.4in					
Weight		Approx. 3	.8kg (8.4 ll	o.)			
Power supplie	es for GP1						
Inverter (plugs into GP1)	Input	12V DC					
	Output	115V AC,	400Hz/12\	/ DC			
	Size	W130 x D5	5 x H240mm	(W5.1 x D2	.2 x H9.4ir		
	Weight	Approx. 1	.7kg (3.8 ll	o.)			
BDC7 Battery	Туре	Ni-Cd external rechargeable battery					
	Output	12V DC					
	Operating time	Approx. 3	Approx. 3 hours at 25°C (77°F)				
	Size	W140 x D50 x H250mm (W5.5 x D2.0 x H9.8in.					
		Approx. 2.0kg (4.4 lb.)					
	Weight	Approx. 2	.0kg (4.4 ll))			
SET X Total S	3		.0kg (4.4 ll SET2X		SET5)		
SET X Total S Telescope	3	SET1X Magnificat		SET3X esolving po			
Telescope	3	SET1X Magnificat Minimum	SET2X tion 30x, Re focus 1.3m	SET3X esolving po (4.3ft.)			
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*1 With Kodak Gray Card white side (90% reflective).

*2 When the measuring beam's incidence angle is within 30° in relation to the reflective sheet target.

Gyro Station Standard Configuration

GP1 gyroscope, SET1X/2X/3X/5X total station, DLC1 Remote trigger

GP1 Standard Accessories

Inverter, BDC7 external battery, charger, 5-pin cable, 3-pin cable, Tubular compass, Eyepiece hood, Bulbs, Fuses, Clamp lock, Cleaning cloth, Vinyl cover, Tool kit, Operator's manual, Carrying case