## **SPECIFICATION**

_		
Ω.		$\sim$
mr.	G	( )

	Hrc O	
TELESCOPE		
Length	154mm	
Objective Lens Diameter	Telescope: 45mm EDM: 50mm	
Magnification	30X	
Image	Erect	
Field of View	1°30'	
Resolving Power	3"	
Mini. Focus	1.0m	
DISTANCE MEASUREMENT		
Single Prism	5000m *1	
Non-Prism	600m <sup>*2</sup>	
Accuracy -Prism Mode	±(2mm+2ppm x D)m.s.e. *3	
-Non-Prism Mode	0-300m:±(3mm+2ppm x D)m.s.e. *3	
	300m-600m: ±(5mm+3ppm x D)m.s.e. *3	
Measuring Time	Fine: 0.3s, Tracking: 0.1s *4	
Atmospheric Correction	T-P Sensor, Auto Detect and Correct	
Prism Constant	Manual Input, Auto Correction	
ANGLE MEASUREMENT		
Method	Absolute Encoding	
Detecting System	H: 2 sides, V: 2 sides	
Min. Reading	0.5", 1", 5", 10" selectable	
Accuracy	2"	
Diameter of Circle	79mm	
Vertical Angle 0°	Zenith 0°/Horizontal: 0°	
Unit	360°/400gon/6400mil	
DISPLAY		
Size	3.5", 320*240 Dot Matrix	
No.of Display	2 Color Screens	
Keyboard	Alphanumeric	
TILT CORRECTION		
Tilt Sensor	Dual Axis	
Method	Liquid Electric	
Range	±3'	
Setting unit	1"	
LEVEL SENSITIVITY		
Plate Level	30"/2mm	
Circular Level	8'/2mm	
OPTICAL PLUMMET (OPTIONAL: INTERNA	AL LASER PLUMMET)	
Image	Erect	
Magnification	3X	
Focusing Range	0.3m ~ ∞	
Field of View	5°	
DATA STORAGE & INTERFACE		
Storage	Internal Memory: 4MB; SD card: max.32GB	
Data Interface	RS232C/SD card/Mini USB	
GENERAL	• • • • • • • • • • • • • • • • • • • •	
Laser Class *5 -EDM	Class IIIA	
-Laser Plummet		
	Class II	
Working Temperature	-20°C ~ +50°C	

### **STANDARD PACKAGE COMPONENTS**

Carrying Case X 1 Charger X 1 Battery X 2 Rain Cover X 1 Mini USB Cable X 1 Software CD X 1 Carrying Belt X 2 Plumb X 1

Adjusting Pin X 1

Screw Driver X 1 Wiping Cloth X 1 Lens Cover X 1 SD-Card X 1 Multi-port Cable X 1 User Manual X 1 Warranty Card X 1 Reflecting Sheet X 1

### **OPTIONAL ACCESSORIES**





TPS26 Single Prism System

TK21SET Prism Set

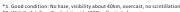












Battery Type

Battery Voltage

Working Time Water & Dust Proof

### SANDING

Rechargeable Lithium Battery

DC 7.4V

IP55

### SANDING OPTIC-ELECTRICS INSTRUMENT CO., LTD.

Add: 2/F, Surveying Building, NO.26, Ke Yun Road, Guangzhou 510665, China E-mail: export@sandinginstrument.com

support@sandinginstrument.com





<sup>\*1.</sup> Good condition: No haze, visibility about 40km, overcast, no s \*2. With Kodak Grey Card white side (90% reflectivity). \*3. D stands for distance. \*4. Typically, under good condition, non-prism measuring time m. \*5. According to FDA21 CFR Ch. 1 § 1040.

NDING

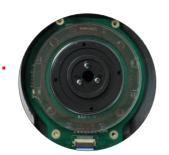
CE

# **FEATURES**

# **PROGRAMS**



600m reflectorless measuring range covers a most common scale in your field job. With a single prism, you can reach up to 5km quickly with 2mm + 2ppm accuracy.



Arc 6 adopts an absolute encoding system, which does not require initialization by 0 set, and delivers a precise and stable angle measurement with up to 2" accuracy.



The dual-axis tilt compensator monitors the inclination of both X and Y axes, and then correct the horizontal and vertical angle reading automatically with a stile scale of 3'.



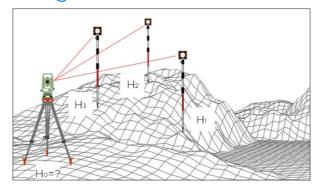
3.5" high definition color screen and 2 sides of alphanumeric keyboards provides clear images and convenient operation even under strong sunlight.



Arc 6 provides various options for data transfer such as SD card, USB and RS232 serial port.

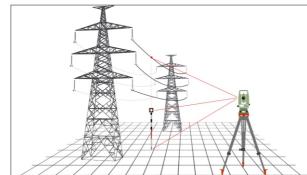


T-P Sensors allows user to detect the surrounding temperature and air pressure hence correct the atmospheric error for distance measurement.



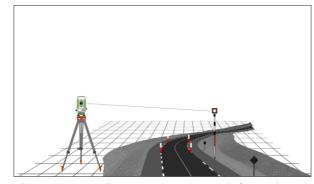
This function determines the height of the instrument from measurements to a maximum of 5 target points, with known height, in two faces. For instance, in the field, we can measure the elevation of the station point on condition that we lost the elevation due to some man-made destroy.

## Remote Height



It lets you measure inaccessible high points. Place a reflector anywhere below the height you want to measure, enter the reflector height, target it, measure the distance, and then target the high point. The total station calculates the height difference between the ground and high points.

## Road



This program allows you easily to define a line or curve or spiral as a reference for measurements and stake outs. It supports chainages, as well as incremental stake out and offsets, greatly simplifying road construction in field.

























Height Transfer

Hidden Point

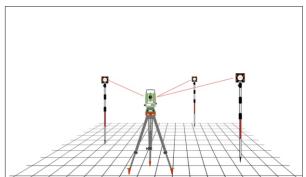
This function allows measurements to the points that is not directly visible, using the special hidden-point rod, for instance, the bottom of a well. Users can acquire the coordinate by taking measurements to the two prisms with a known distance between them and the distance to the bottom of the well.

# Reference Line/Arc



This program facilitates the easy stake out or checking the lines for buildings, sections of road, simple excavations, etc. A reference line can be defined by referencing a known base line. The reference line can be offset either longitudinally, in parallel or vertically to the base line, or be rotated around the first base point as required.

## Free Station



This application is used to determine the instrument position from measurements to a minimum of two known points and a maximum of five known points, which is widely used in detailed surveying.