SPECIFICATION

ETS-102   ETS-101

ETS-100 SERIES WinCE Total Stations

TELESCOPE	
Length	154mm
Objective Lens Diameter	Telescope: 45mm EDM: 50mm
Magnification	30X
Objective aperture	48mm
Image	Erect
Field of View	1°30'
Resolving Power	3"
Mini. Focus	0.5 to 0.9m
DISTANCE MEASUREMENT	
Single Prism	5000m
Non-Prism	1000m
Accuracy -Prism Mode	(1mm+1.5ppmxD)m.s.e.*3
-Non-Prism Mode	1-100m:±(2mm+2ppm x D)m.s.e. *3; 100-600m:±(3mm+2ppm x D)m.s.e.3;600m-1000m:±(5mm+3ppmxD)m.s.e.*3
Measuring Time	Fine: 0.3s, Tracking: 0.1s
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	0.1", 1", 0.5" selectable
Accuracy	2" | 1"
Diameter of Circle	79mm
Vertical Angle 0°	Zenith 0°/Horizontal: 0°
Unit	360°/400gon/6400mil
DISPLAY	
Size	3.5", 640*480
No.of Display	Color TFT LCD touch screen with LED backlit alphanumeric keyboard
Distance resolution	Fine/Rapid: 0.001m
	Tracking: 0.01m
Keyboard	Alphanumeric
TILT CORRECTION	
Tilt Sensor	Quadruple Axis (two-axis compensation combined with Hz collimation and V index correction)
Method	Liquid Electric
Range	±6'
Setting unit	1"
LEVEL SENSITIVITY	
Plate Level	30"/2mm
Circular Level	8'/2mm
OPTICAL PLUMMET (OPTIONAL: INTERNAL LASER PLUMMET)	
Image	Erect
Magnification	3X
Focusing Range	0.5m ~ ∞
Field of View	5°
Accuracy (if laser plummet)	1.5mm at 1.5m instrument height upto 3m
System	
Operation System	Windows CE 7.0
Protection lock	accessible with PIN code to protect data
Bluetooth	Bluetooth 2.0 with working range 10m
Memroy	1,20,0000 RAW Point/4GB Internal and External upto 16GB Supportable
Data Interface	RS232C/SD card/Mini USB
GENERAL	
Laser pointer	Coaxial red laser
Laser Class *5 EDM Reflector less	Class 2
Sheet/Prism mode	Class 1
Exterior material	Water soluble anti-corrosive Acrylic orange paint
Working Temperature	-20°C ~ +55°C
Battery Type	Detachable Rechargeable Lithium Battery 3400mAh x 02 Nos.
Battery Voltage	DC 7.4V, 3400mAh
Working Time	36 hours angle mode and 18 hours NEZ, ANGLE & DISTANCE (ALLTOGETHER)
Water & Dust Proof	IP66

*1. Good condition: No haze, visibility about 40km, overcast, no scintillation.   *2. With Kodak Grey Card white side (90% reflectivity).   *3. D stands for distance.   *4. Typically, under good condition, non-prism measuring time may differ according to measuring target, observation situations, and environmental conditions.   *5. According to FDA21 CFR Ch.1 §.1040.

STANDARD PACKAGE COMPONENTS

Carrying Case X 1
Charger X 1
Battery X 2
Rain Cover X 1
Mini USB Cable X 1
Carrying Belt X 2
Plumb X 1
Adjusting Pin X 2
USB Stick 8GB X 1

Screw Driver X 1
Wiping Cloth X 1
Lens Cover X 1
SD-Card X 1
Allen Key X2
User Manual X 1
Warranty Card X 1
Reflecting Sheet X 1
Stylus X 2
Measuring Tape 3m X 1

OPTIONAL ACCESSORIES

TPS26
Single Prism System

TK21SET
Prism Set

ATS-2
Aluminum Tripod

ATS-L
Wooden Tripod

TPS106
Prism Pole
& Prism System

IEC Standard Compliance

ISO 14001:2015

ISO 9001:2015
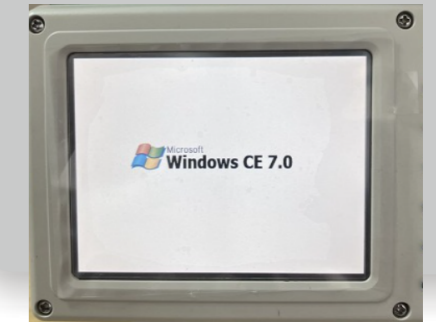
MSME
सूक्ष्म , लघु एवं मध्यम उद्यम
MICRO, SMALL & MEDIUM ENTERPRISES

N S I C

TRADE MARKS REGISTRY
MUMBAI

ROBUST

ROBUST FieldGenius

Windows CE 7.0

Windows CE
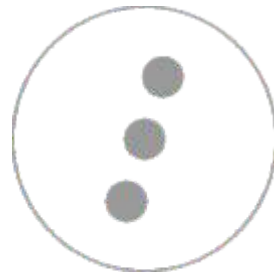
MicroSurvey FIELDGenius

FEATURES
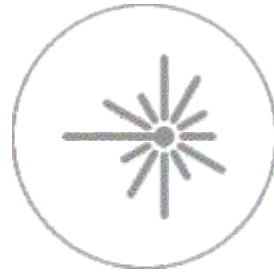
1000m reflectorless

measuring range covers a most common scale in your field job. With a single prism, you can reach up to 5km quickly with high accuracy.

ETS-101 Series adopts an absolute encoding system, which does not require initialization by 0 set, and delivers a precise and stable angle measurement with up to 1"/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′.

ETS-101 Series provides various options for data transfer such as SD card, USB and RS232 serial port.

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

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

FieldGenius includes more advanced features than any other data collection system, as well as various productivity enhancements which allows you to work faster and more efficient in the field.
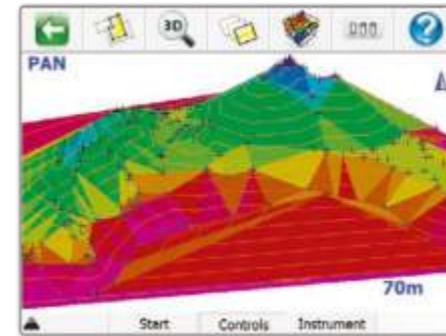
Digital Terrain Modeling, Volumes, and Contouring

FieldGenius has the ability to utilize DTM surfaces from existing survey data or create a DTM in real time as the data is collected. The TIN and contours will automatically update as each new shot is taken.
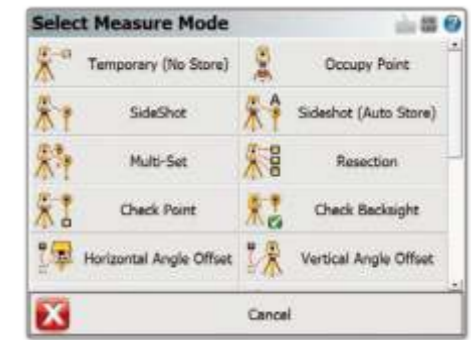

Georeferenced Images

Use georeferenced images and maps to visualize data in the background of your survey work.

Powerful RPN Calculator

FieldGenius includes an easy-to-use and intuitive RPN calculator. Quick access to the calculator from any edit field makes survey calculations and routines a breeze.

Powerful Roading

FieldGenius roading allows you to manually input or import your alignment data including centerline, vertical and template data. Powerful alignment staking tools help you stake your points along your alignment with confidence.
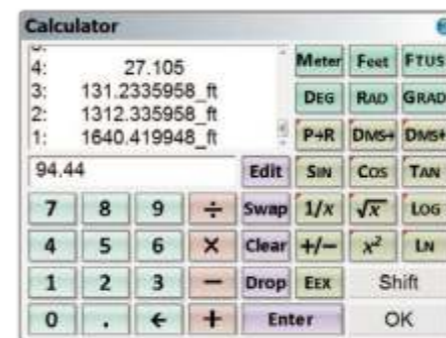

Instrument Control at your Fingertips

Total Station and GPS functions are available on a common and easy-to-use instrument toolbar. Access measure modes with the click of a button.

User Definable Shortcuts

Increase your productivity by assigning frequently used commands to keys on your data collector.