

TheoDist® FTD 05

Reflectorless Construction Tachymeter



» The geo-FENNEL TheoDist® is an instrument designed to be easy to use and quick to set up on any construction site. Inexperienced users and professionals alike will benefit from the menu driven software with its intuitive structure and function keys improving productivity and saving valuable time. The principle features of the geo-FENNEL TheoDist® are:

- Measuring programs that provide efficient and easy solutions for setting out.
- Reflectorless measurement makes inaccessible target positioning a thing of the past.
- Three-dimensional measurement of coordinates.
- Menu driven software with intuitive structure to maximize productivity.
- A visible laser pointer to improve targeting accuracy and allowing measurements to be taken without looking through the telescope.
- Data can be uploaded and downloaded to a PC via the RS232 connection.
- Quick and easy set-up with the integrated laser plummet.
- Measuring range of up to 200 m without a reflector and 600 m with a reflector.

The geo-FENNEL TheoDist® is equipped with a variety of programs from simple distance and angle measurement up to precise three-dimensional setting out:

- » **Coordinate:** Measuring and working in a three dimensional coordinate system.
- » **Missing Line:** Calculation of the slope distance, horizontal distance and vertical height difference between two measured points.
- » **Offset:** Calculates the distance and angle to a point you want to measure by positioning the target in front, behind or perpendicular to the line of sight.
- » **REM:** Measures the height to an object by indirect measurement when a direct measurement is inaccessible.
- » **Resection:** Determines the coordinates of the instrument by measuring multiple known points. The instrument can determine its position from a minimum of two to a maximum of 10 known points.
- » **Area:** The area can be calculated by measuring its perimeter with a minimum of three points.

The communication software supplied with the geo-FENNEL TheoDist® allows the user to save the data in various formats. The data files can be converted into DXF format making them suitable to be uploaded into CAD Software such as AutoCAD.



- 1 Clearly visible display with all functions
- 2 RS-232 data connection for universal use
- 3 Complete kit supplied



TECHNICAL DATA	THEODIST FTD 05	FEATURES
Telescope		<ul style="list-style-type: none"> · With laser pointer for targeting · Integrated laser plummet for quick and easy setting up over a ground point · Narrow laser beam for precise targeting and measuring · Electronic compensation system for monitoring the system levelling and elimination of levelling errors · Internal memory for 50.000 points · Easy user defined alphanumeric function keys (26 buttons only) · NiMH rechargeable batteries
Image	erect	
Objective aperture (EDM)	45 mm	
Magnification	30 x	
Field of view	1° 30'	
Resolving power	4"	
Shortest focussing distance	1,5 m	
Distance measurement		
Reflectorless	1 – 200 m	
Flat prism FP 50	1 – 600 m	
Reflective tape target RS	1 – 600 m	
Single standard prism 62 mm	1 – 600 m (Offset = 0)	
Accuracy	3 mm + 2 ppm	
Measuring time		
(fine / rapid / tracking)	1,5 s / 0,9 s / 0,3 s	
Minimum reading	1 mm	
Units	ft / m	
Angle measurement		
Minimum reading resolution steps	1" / 5" / 10"	
Accuracy	5"	
Angle units	100% / 360° / 400gon	
Compensator		
Type	electronical	
Range	± 3°	
Laser Pointer		
Laser class	3R	
Laser plummet		
Accuracy	± 1 mm / 1,5 m	
Laser class	2	
Display		
Dual LCD	4 lines, 24 characters	
Power supply		
Rechargeable battery	7,2 V DC NiMH	
Operating time	5 h	
Charger	100 / 240 V	
Vial sensivity		
Plate level vial	30" / 2 mm	
Circular vial	8' / 2 mm	
General		
Internal memory capacity	50.000 points	
Weight (instrument)	6,0 kg	
Operating temperature	-20 °C – +50 °C	
Dust / water protection	IP 54	
I/O-Port	RS-232	
		SUPPLIED WITH
		ART.-NO. 700000
		<ul style="list-style-type: none"> · Charger · 2 rechargeable battery sets · Data transfer cable · Software · Flat prism FP 50 · Container