OTS630 series Specifications

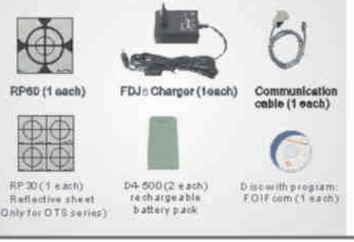
Items \ Model	OTS632	OTS632L*1	OTS635	OTS635L
Telescope				
Length	158mm			
Image	Erect			
Objective aperture (EDM)	ϕ45mm			
Magnification	30×			
Field of view	1° 20′			
Shortest focus distance	1.7m			
Distance measurement				
Laser wave length	650-690nm			
Spot size at 50m	12mm/50m ellipse			
Laser class	Class 1(prism)/Class 3R(reflectorless)			
Measurement range (Good condition *2)				
Reflectorless distance measurement White target/KODAK CAT No.E1527759	1 to 150m			
Reflective sheet/RP30	1 to 500m			
Reflective sheet/RP60	1 to 700m			
Mini-prism	1 to 1200m			
Single prism	1 to 5000m			
Accuracy(Fine/Rapid/Tracking)	(3mm+3ppm)/(4.5mm+3ppm)/(10mm+3ppm)			
Measuring time(Fine/Rapid/Tracking)	1.2s(Initial:3s)/0.9s(Initial:3s)/ 0.5s			
Minimum reading(Fine/Rapid/Tracking)	1mm/1mm/10mm			
Temperature input range	-30℃to+60℃(1℃steps)			
Pressure input range	510hPa to 1066hPa(1hPa steps)			
Prism constant correction	-99.9mm to +99.9mm			
Angle measurement				
Reading system	Photoeledric incremental encoder			
Angle unit	360° /400gon/mil, selectable			
Minimum reading				
DEG unit	1″ /5″ /10″			
GON unit	0.2mgon/1mgon/2mgon			
Accuracy*3	2″	2″	5″	5″
Automatic vertical compensator				
Range	±3′			

Items \ Model	OTS632	OTS632L	OTS635	OTS635L
Optical plummet				
Accuracy	±0.8mm/1.5m			
Image	Erect			
Magnification	3×			
Field of view	4°			
Focus range	0.5 to ∞			
Laser plummet(Factory optional)				
Accuracy	±0.8mm/1.5m			
Laser class	Class 2/IEC60825-1			
Laser spot size/intensity	Adjustable			
Laser wave length	635nm			
Focus range	0.5 to ∞			
Display				
Display unit	LCD 4lines×16characters			
Power				
Battery	Ni-MH Rechargeable battery			
Output voltage	7.2V DC			
Continuous operation time	4hours,continuous distance/angle measurement			
	12hours, angle measurement only			
Charger	FDJ6 (110V to 220V accepted)			
Charging time	Approx 3.5hours			
Integrated programs				
Setting out/Data collection/Resection/REM/MLM/Stake out				
Area/PTL/Z coordinate/Azimuth/Offset				
Level vial sensitivity				
Plate level vial	30″ /2mm			
Circular level vial	8′ /2mm			
Others				
Internal memory	8000points			
Keyboard				
Weight(include batteries)	5.3kg			
Dimensions	(WxDxH)170x175x350mm			
Operating temperature	-20℃to+50℃			
Storage temperature	-40℃to+70℃			
Serial Interface	RS-232C			
Data transfer Special software : FOIF com600				
Water proof	IP×4 (IEC60529)			

*1 "L" means laser plummet, without "L" means optical plummet *2 Good condition: no haze, visibility about 30km *3 standard deviation based on DIN 18723

OTS630 2007.04

Standard Components

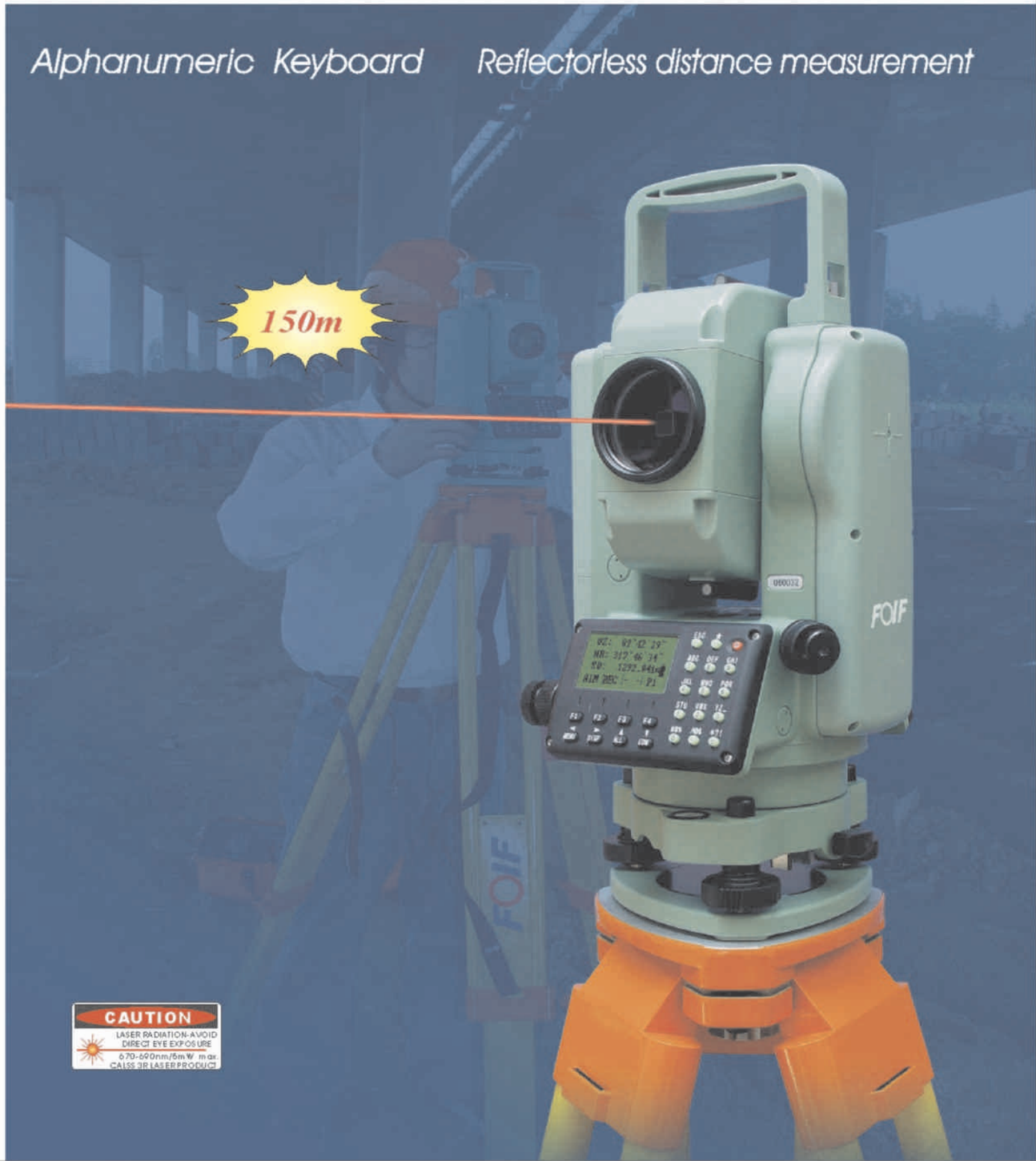


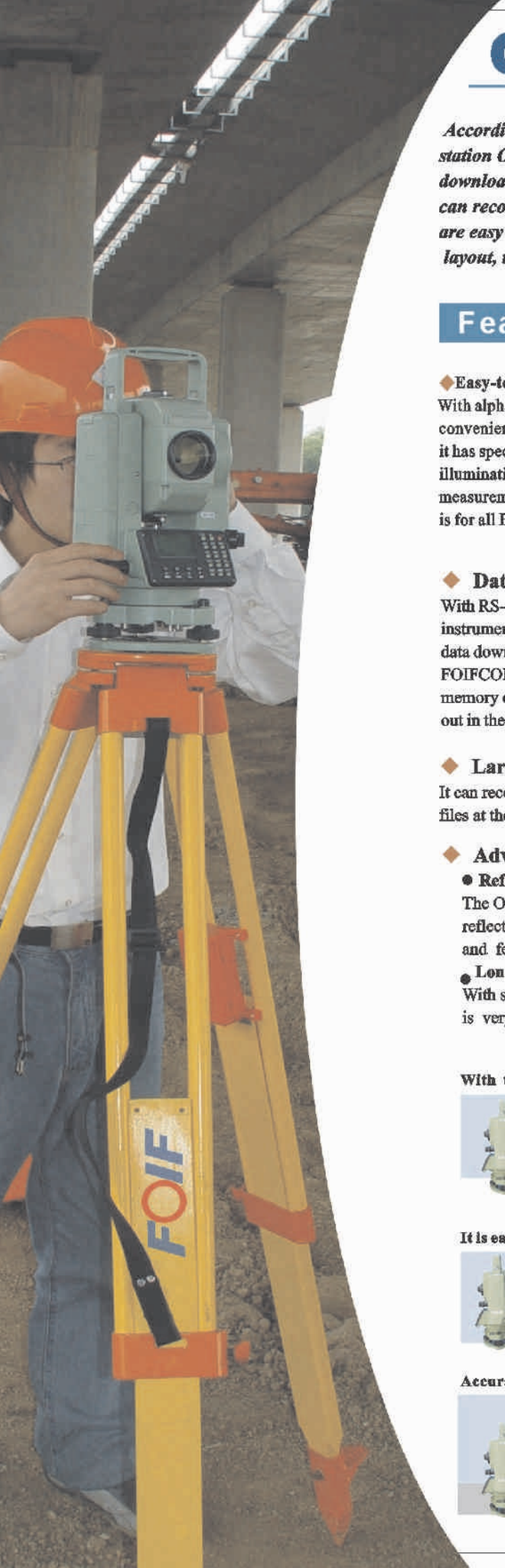
Optional Accessories

Janak Positioning & Surveying Systems Pvt. Ltd.
"Ram Group" 304-B, Pal Mohan Plaza, 11/56,
D.B. Gupta Road, Karol Bagh,
New Delhi-110005
Phone: 011-23515400, 23515399, 23617190
Fax: 011-23682185 ; Mobile: +91-9811008317
janak.ji@yahoo.com, janakji@vsnl.com
www.janakindia.com
www.janaksurvey.com

Suzhou FOIF Co.,Ltd.
TEL:+86 512 65224904
FAX:+86 512 65230619
Http://www.folf.com.cn
E-mail:internationalsales@folf.com.cn
ADD: 4 Kong Fu Si Lane, Suzhou 215006, P.R. China

OTS 630 series
Total station





OTS630 series Total Station

According to market demand, FOIF is pleased to announce the launch of total station OTS 630 series with alphanumeric keyboard. Meanwhile, it can upload and download data easily with PC or data collectors, and the expanding internal memory can record 8000 points. With these excellent features, OTS 630 series total station are easy to muse and reliable enough to be widely used for building setting out, road layout, topography survey or control survey etc.

Features

◆Easy-to-use keyboard

With alphanumeric and function key, it is easy and convenient to input character or number. Otherwise, it has special keys for cursor, power, escape, illumination. And the [ALL] key is used for measurement and record together. The [EDM] key is for all EDM parameter settings.

◆ Data download and upload

With RS-232C and open protocol, connect the instrument and computer or Data Collectors for easy data download and storage, moreover, with software FOIFCOM you can upload directly to internal memory of OTS 630 series for convenient setting out in the field.

◆ Large internal memory and convenient file management

It can record 8000 coordinate data points or 4000 raw data points, and it is possible to record 8 files at the same time, so it is unnecessary to worry memory space for users.

◆ Advanced distance measurement

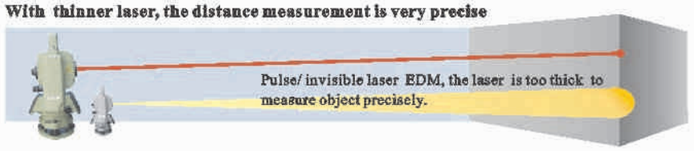
- **Reflectorless EDM**

The OTS 630 series can focus a visible laser beam on the object which could not to be set up reflector. Thinner laser spot aim the corner accurately; Aim the target through the gridding and fencing easily.

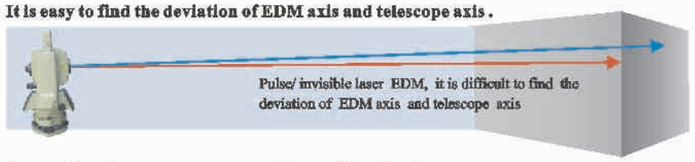
- **Long distance measurement range**

With single prism, the distance range can be reached to 5000m; The offered reflective sheet is very convenient for users.

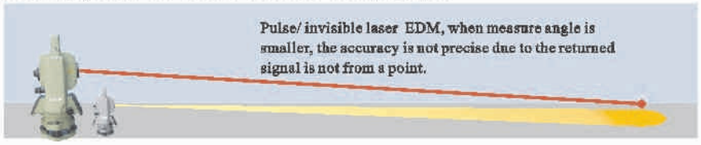
With thinner laser, the distance measurement is very precise



It is easy to find the deviation of EDM axis and telescope axis .



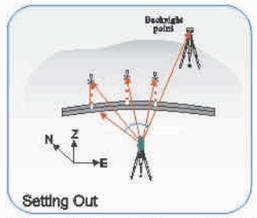
Accurately distance measurement for small angle object



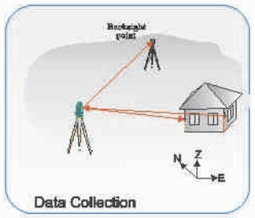
OTS630 series Total Station

Integrated programs

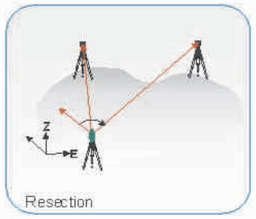
OTS 630 series offer many professional programs, and it has the function of memory management system, you can edit, delete, review and record data or file easily, so the model of total station can adapt different survey projects.



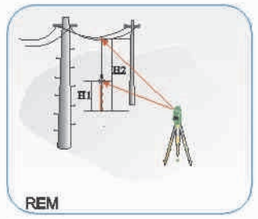
Normally it displays angle difference (dHR) and distance difference (dHD), and freely change to coordinate difference mode(dX, dY, dZ).



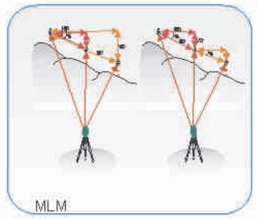
Various mode of data collection, point's data can be recorded as angle & slope distance mode, or coordinate mode, or horizontal distance and height difference mode.



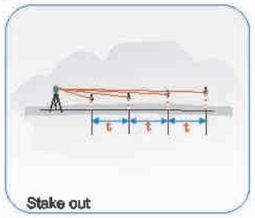
By setting up the instrument at an unknown point and measuring to at least two (max five) known points, the coordinates of the instrument can be computed, the results is very reliable.



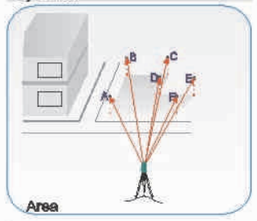
Two mode of with prism and without prism can be selected to measure the height of point where a prism cannot be placed.



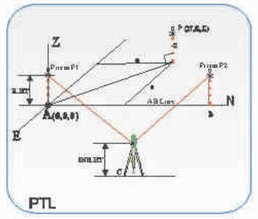
The horizontal distance, slope distance and height distance of reference point to any point or two adjacent points can be easily measured.



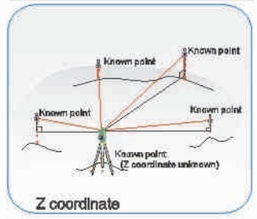
In road measurement, it used for offset of stake out. It also can be used to layout of polar coordinate when the angle and distance are known.



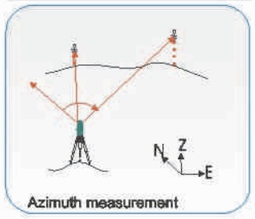
The object surface area is calculated and displayed as each target point is measured.



The Point to Line mode (PTL) is a method of interpretation of the point coordinates, the coordinates are define from two known points, the line that through these points is set as one axis and its perpendicular as another.



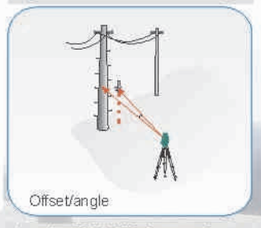
Measuring several known points (X, Y, N)to calculate and reset Z coordinate of occupied point



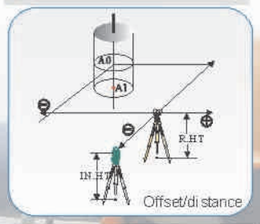
The azimuth angle from occupied point to unknown point can be measured conveniently.

◆ Laser plummet (Factory optional)

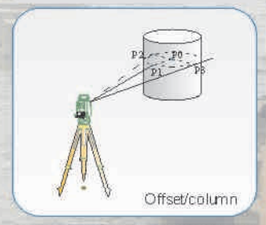
The OTS 630 series can offer optical plummet or laser plummet (factory optional accessory). For the optical plummet, 3X magnification is available; For the laser plummet, laser intensity and focus can be adjusted. It is easy to center. The laser spot is clear enough to be seen under the sunlight. And the laser power can be turned on separately form system power.



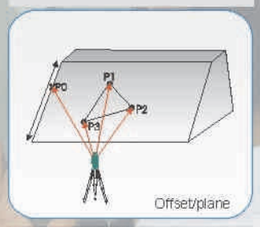
Any point which is difficult to set up the prism can be measured with this program, for example, center of tree, or a corner.



The measurement of a place apart from a prism is possible by inputting offset horizontal distance of front and back/right and left.



Measure circumscription point (P1) of column directly, the distance to the center of the column (P0), coordinate and direction angle can be calculated by measured circumscription points (P2) and (P3).



Three points (P1, P2, P3) on a plane will be measured at first to determine a plane. Collimate the measuring point (P0) then instrument calculates and displays coordinates and distance value of cross point between collimation axis and of the plane.