

## RTS010/RTM010 High Precision Total Station



- Angle measurement accuracy: 1", distance measurement accuracy: 1mm+1ppm(Prism)
- 1000m long range reflectorless distance measurement
- RTM010----industrial measurement instrument, distance measurement accuracy reaches to 1mm+1ppm with reflective sheet
- Ultra-narrow EDM laser beam, can precisely measures high voltage wire, walls, corners, manholes on the road surface, even chain-link fences and tree branches
- High accuracy surveying can be achieved in an easy, fast and reliable way
- Applied for high precision surveying areas, such as high-speed railway construction, structural monitoring and large-scale 3D measurement
- Windows CE 7.0 operating system, onboard software: FOIF Survey,FOIF Fieldgenius or Carlson SurvCE















## RTS010/RTM010 High Precision Total Station

## ■ Technical data

RTS010 RTM010	RTS010 RTM010
Telescope	Compensator Dual-axis compensator
Length/Image 156mm/Erect	Working range ±3′
Objective aperture $\Phi$ 45mm	Setting accuracy 1"
Magnification 30x	Laser plummet(Standard)*4
Field of view 1° 30′	Accuracy $\pm 1.0$ mm/ $1.5$ m
Shortest focus distance 1.0m	Laser class Class 2/IEC60825-1
Angle measurement	Laser brightness Adjustable
Reading system Absolute encoder	Laser wave length 635nm
Angle unit 360° /400gon/6400mil, selectable	Optical plummet(Factory optional)
Display resolution 0.1" /0.5" /1"	Accuracy $\pm 0.8$ mm/1.5m
(or 0.02mgon/0.1mgon/0.2mgon)	Image Erect
Accuracy*1	Magnification 3 ×
Distance measurement	Field of view 4°
Laser class	Focus range 0.5m to ∞
Standard prism mode Class 1	Display 3.5" colour TFT LCD (320 x 240 dots) touch screen
Long prism mode Class 2	transflective sunlight readable display
Reflective sheet Class 2	Power
Standard reflectorless mode Class 2	Battery 3400mAh Li-ion Rechargeable
Long reflectorless mode Class 3R	Output voltage 7.4V DC
Measurement range (Good condition )*2	Continuous operation time 8 hours
Standard mode/Prism 1 to 6000m	(Single distance measurement every 30 seconds)
Reflective sheet/RP60 1 to 1200m	Charger FDJ6-LI(100V/240V)
Reflectorless*3 1 to 1000m	Charging time Approx.4 hours
Accuracy	Application programs
Standard prism mode 1mm+1ppm	Data collection/Stake out/Resection/REM/MLM/Point to line
Reflective sheet/RP60 2mm+2ppm 1mm+1ppm	AREA/Z coordinate/OFFset/3D Road/Traverse adjustment
Reflectorless 2mm+2ppm(0.1-500m); 4mm+2ppm(500-1000m)	Tape measurement/section/Axis positioning measurement
Typital measuring time(max.20s)	Others
Prism standard mode 1.0s~5.0s	CPU ARM Cortex A8
Prism long mode 0.7s~6s	Memory 4GB internal memory
Reflective sheet/RP60 1s~5s	Sensors Built-in temperature and pressure sensors
Reflectorless 1-500m:0.7s~6s	Keyboard Alphanumerical illuminated key board, both side
>500m:3s~12s	Weight(including batteries) 6.5kg
Display resolution(m/inch selectable) 0.1mm/1mm	Dimensions(WxDxH) 185x220x360mm
Temperature input range $-40^{\circ}$ C to $+60^{\circ}$ C(1°C steps)	Operating temperature -20℃ to +50℃
Pressure input range 500hPa to 1500hPa( 1hPa steps)	Storage temperature $-40^{\circ}\mathrm{C}$ to $+70^{\circ}\mathrm{C}$
Prism constant correction -99.9mm to +99.9mm	Interface USB host/USB slave/RS-232C/Bluetooth(Optiona
Level vial sensitivity	Water and dust protection IP55(IEC60529)
Plate level vial 30" /2mm	Data transfer&processing software FOIF Geomatics Office(FGG
Circular level vial 8' /2mm	Data collector F58, fully rugged PDA(Optional)

<sup>\*1</sup> Standard deviation based on ISO17123-3

Illustrations, descriptions and technical specifications are not binding and may change



Suzhou FOIF Co.,Ltd.

TEL:+86 512 65224904 FAX:+86 512 65230619 Http://www.foif.com E-mail:internationalsales@foif.com.cn ADD: 18 Tong Yuan Road, Suzhou 215006, P.R. China



Local Dealer:



<sup>\*2</sup> Good conditions: no haze, visibility about 40km, no heat shimmer, breeze