



# RTS010/RTM010 High Precision Total Station



- Angle measurement accuracy: 1" , distance measurement accuracy: 1mm+1ppm
- 1000m long range reflectorless distance measurement
- Ultra-narrow EDM laser beam, can precisely measure 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 area, such as high-speed railway construction, structural monitoring and large-scale 3D measurement
- Multiple data interface, USB host, USB slave or RS-232C data transfer are available
- Compact design with Windows CE 5.0 operating system



# RTS010/RTM010 High Precision Total Station

RTS010 2013-08

## Technical data

	RTS010	RTM010		RTS010	RTM010
<b>Telescope</b>			<b>Compensator</b>		
Length/Image	156mm/Erect		Working range	±3'	
Objective aperture	φ45mm		Setting accuracy	1"	
Magnification/Resolving Power	30×/3"		<b>Laser plummet(Standard)*4</b>		
Field of view	1° 30'		Accuracy	±1.0mm/1.5m	
Shortest focus distance	1.0m		Laser class	Class 2/IEC60825-1	
<b>Angle measurement</b>			Laser brightness	Adjustable	
Reading system	Absolute encoder		Laser wave length	635nm	
Angle unit	360° /400gon/6400mil, selectable		<b>Optical plummet(Factory optional)</b>		
Display resolution	0.1" /0.5" /1" (or 0.02/0.1mgon/0.2mgon)		Accuracy	±0.8mm/1.5m	
Accuracy*1	1"		Image	Erect	
<b>Distance measurement(R1000)</b>			Magnification	3×	
Laser class			Field of view	4°	
Prism standard mode	Class 1		Focus range	0.5m to ∞	
Prism long mode	Class 2		<b>Display</b> 3.5" colour TFT LCD (320 x 240 dots) touch screen		
Reflective sheet	Class 2		transflective sunlight readable display		
Reflectorless standard mode	Class 2		<b>Power</b>		
Reflectorless long mode	Class 3R		Battery	3400mAh Li-ion Rechargeable	
Measurement range (Good condition)*2			Output voltage	7.4V DC	
Standard mode/Prism	1 to 3500m		Continuous operation time	8 hrs in distance & 20 hrs in angle measurement mode*5	
Long mode /Prism	1 to 6000m		Charger	FDJ6-Li(110V /240V )	
Reflective sheet/RP60	1 to 1200m	1 to 2000m	Charging time(at +20°C)	Approx. 4 hours	
Reflectorless*3	1 to 1000m		<b>Application programs</b>		
Accuracy			Data collection/Stake out/Resection/REM/MLM/Point to line		
Prism standard mode	1mm+1ppm		AREA/Z coordinate/OFFset/3D Road/Traverse adjustment		
Prism long mode	2mm+2.5ppm		Tape measurement/section/axis positioning measurement		
Reflective sheet/RP60	2mm+2ppm	1mm+1ppm	<b>Others</b>		
Reflectorless	1-500m:2mm+2ppm >500m:4mm+2ppm		CPU	ARM9 Core	
Typital measuring time(max.20s)			Memory	2G internal memory	
Prism standard mode	1.0s~5.0s		Sensors	Built-in temperature and pressure sensors	
Prism long mode	0.7s~6s		Keyboard	Alphanumerical illuminated key board, both sides	
Reflective sheet/RP60	1s~5s		Guide Light System	Factory optional	
Reflectorless	1-500m:0.7s~6s >500m:3s~12s		Weight(including batteries)	6.5kg	
Display resolution(m/inch selectable)	0.1mm/1mm		Dimensions(WxDxH)	180x220x360mm	
Temperature input range	-40°C to+60°C(1°C steps)		Operating temperature	-20°C to+50°C	
Pressure input range	500hPa to 1500hPa( 1hPa steps)		Storage temperature	-40°C to +70°C	
Prism constant correction	-99.9mm to +99.9mm		Interface	USB host/USB slave/RS-232C/Bluetooth(Optional)	
<b>Level vial sensitivity</b>			Water and dust protection	IP55(IEC60529)	
Plate level vial	30" /2mm		Data transfer&processing software	FOIF Geomatics Office	
Circular level vial	8' /2mm		Data collector	PS236, fully rugged PDA(Optional)	

\*1 Standard deviation based on ISO17123-3

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

\*3 Reflector: White side of Kodak Gray Card with 90% reflective

\*4 Laser plummet mounted on the bottom of the vertical axis

\*5 Single distance measurement every 30 seconds

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

**FOIF** Since 1958  
It's professional

**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:**