



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 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
- Windows CE 5.0 operating system, onboard software: FOIF Fieldgenius or Carlson SurvCE



RTS010/RTM010 High Precision Total Station

Technical data

RTS010		RTM010	RTS010		RTM010
Telescope			Compensator		
Length/Image	156mm/Erect		Dual axis compensator		
Objective aperture	φ45mm		Working range	±3'	
Magnification	30x		Setting accuracy	1"	
Field of view	1° 30'		Laser plummet(Standard)*4		
Shortest focus distance	1.0m		Accuracy	±1.0mm/1.5m	
Angle measurement			Laser class	Class 2/IEC60825-1	
Reading system	Absolute encoder		Laser brightness	Adjustable	
Angle unit	360° /400gon/6400mil, selectable		Laser wave length	635nm	
Display resolution	0.1" /0.5" /1" (or 0.02mgon/0.1mgon/0.2mgon)		Optical plummet(Factory optional)		
Accuracy*1	1"		Accuracy	±0.8mm/1.5m	
Distance measurement			Image	Erect	
Laser class			Magnification	3x	
Standard prism mode	Class 1		Field of view	4°	
Long prism mode	Class 2		Focus range	0.5m to ∞	
Reflective sheet	Class 2		Display 3.5" colour TFT LCD (320 x 240 dots) touch screen		
Standard reflectorless mode	Class 2		transflective sunlight readable display		
Long reflectorless mode	Class 3R		Power		
Measurement range (Good condition)*2			Battery	3400mAh Li-ion Rechargeable	
Standard mode/Prism	1 to 3500m		Output voltage	7.4V DC	
Long mode /Prism	1 to 30000m		Continuous operation time	8 hours	
Reflective sheet/RP60	1 to 1200m	1 to 2000m	(Single distance measurement every 30 seconds)		
Reflectorless*3	1 to 1000m		Charger	FDJ6-Li(110V /240V)	
Accuracy			Charging time(at +20°C)	Approx. 4 hours	
Standard prism mode	1mm+1ppm		Application programs		
Long 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	1-500m:2mm+2ppm		Tape measurement/section/Axis positioning measurement		
	>500m:4mm+2ppm		Others		
Typical measuring time(max.20s)			CPU	ARM9 Core	
Prism standard mode	1.0s~5.0s		Memory	2G internal memory	
Prism long mode	0.7s~6s		Sensors	Built-in temperature and pressure sensors	
Reflective sheet/RP60	1s~5s		Keyboard	Alphanumerical illuminated key board, both sides	
Reflectorless	1-500m:0.7s~6s		Weight(including batteries)	6.5kg	
	>500m:3s~12s		Dimensions(WxDxH)	180x220x360mm	
Display resolution(m/inch selectable)	0.1mm/1mm		Operating temperature	-20°C to+50°C	
Temperature input range	-40°C to+60°C(1°C steps)		Storage temperature	-40°C to +70°C	
Pressure input range	500hPa to 1500hPa(1hPa steps)		Interface	USB host/USB slave/RS-232C/Bluetooth(Optional)	
Prism constant correction	-99.9mm to +99.9mm		Water and dust protection	IP55(IEC60529)	
Level vial sensitivity			Data transfer&processing software	FOIF Geomatics Office	
Plate level vial	30" /2mm		Data collector	PS236, fully rugged PDA(Optional)	
Circular level vial	8' /2mm				

*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

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: