

RTS100 Series Total Station



- Measuring distance:600m(R600)/1000m(R1000)
- Same technical maintenance on R600 and R1000
- Bluetooth cable-free connection(Factory Optional)
- 120000 points and 40 jobs can be saved
- Can be operated with a data collector, FOIF FieldGenius, or other third party software is available
- IP66 environmental protection
- Alphanumeric keyboard



RTS100 Series Total Station

Technical data

	RTS102	RTS105		RTS102	RTS105
Telescope			Compensator	Dual-axis	
Length	156mm		Range	±3'	
Image	Erect		Setting accuracy	1"	
Objective aperture	44.5mm		Level vial sensitivity		
Magnification	30x		Plate level vial	30"/2mm	
Field of view	1° 30'		Circular level vial	8"/2mm	
Shortest focus distance	1.0m		Laser plummet(Standard) ^{*4}		
Angle measurement			Accuracy	±1mm/1.5m	
Reading system	Absolute encoder		Laser class	Class 2/IEC60825-1	
Angle unit	360° /400gon/6400mil. selectable		Laser spot brightness	Adjustable	
Display resolution	1" /5" /10" (or 0.2mgon/1mgon/2mgon)		Laser wave length	635nm	
Accuracy ^{*1}	2"	5"	Optical plummet(Factory Optional)		
Distance measurement			Accuracy	±0.8mm/1.5m	
Laser class(IEC60825-1)			Image	Erect	
Reflectorless	Class 3R		Magnification /Field of view	3-/4"	
Reflective sheet/RP60	Class 3R		Focus range	0.5m to ∞	
Prism	Class 1		Power		
Measurement range (Good condition) ^{*2}			Battery	3400mAh Li-ion Rechargeable	
Reflectorless ^{*3}			Output voltage	7.4V DC	
R600	1 to 600m		Continuous operation time	Approx. 26 hours(At +20°C) (Single distance measurement every 30 seconds)	
R1000	1 to 1000m		Charger	FDJ6-LI 100V/240V	
Reflective sheet/RP60	1 to 800m		Charging time(at +20°C)	Approx.4 hours	
Single prism	1 to 5000m		Application programs		
Accuracy			Data collection/Stake out/Resection/REM/MLM/Road		
Prism	2mm+2ppm		AREA/Point to line/Z coordinate/OFFset/Arc staking out		
Reflective sheet/RP60	3mm+2ppm		Others		
Reflectorless			Display	LCD, 6lines X20characters(96 X160 dots)	
R600	1-150m:3mm+2ppm;150-300m:5mm+3ppm >300m:10mm+5ppm		CPU	32bit	
R1000	1-150m:3mm+2ppm;150-300m:5mm+3ppm 300-500m:10mm+5ppm;>500m:20mm+10ppm		Memory	120000 points, support SD card(max.16G)	
Measuring time	Initial:2s		Keyboard	Alphanumerical key board, both sides	
Prism	typ.1.0-1.5s		Weight(including batteries)	5.1kg	
Reflective sheet/RP60	typ.1.5s		Dimensions(WxDxH)	175x178x140mm	
Reflectorless	typ.1.5-5s, max. 20s		Operating temperature	-20°C to +50°C	
Display resolution(m/inch selectable)	0.2mm/1mm		Storage temperature	-40°C to +70°C	
Temperature input range	-40°C to +60°C(1°C steps)		Interface	USB/RS-232C/Bluetooth(Factory Optional)	
Pressure input range	500hPa to 1500hPa(1hPa steps)		Water and dust protection	IP66(IEC60529)	
Prism constant correction	-99.9mm to +99.9mm		Data transfer software	FOIF Geomatics Office(FOG)	
			Data collector	F58, 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

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