SOKKIA

SRX

- *New Auto-Tracking Technology*
- *New Motor Drive Mechanism*
- *1000m (3280ft) Reflectorless Measurement*

RED-tech 800

The New SRX Features Innovative Auto-Tracking and EDM Technologies that Maximize the Robotic Surveying Capability

■ Extremely Robust Auto-Tracking

The new SRX total stations feature cutting-edge laser technology, optimized optical design, newly-developed motor drive mechanism, and further refined tracking algorithm, to achieve extremely robust Auto-Tracking capability. The new SRX constantly tracks a moving prism even in strong backlight or with repetitive interruptions in the line-of-sight, dramatically reducing possibility of losing a prism lock. Even if the lock is lost, the advanced on-demand remote control system allows the SRX to instantly recover the prism lock, ensuring increased productivity in all robotic surveying and setting-out tasks.

■ 1,000m (3,280ft.) Reflectorless Measurement Range

New RED-tech 800 EDM provides increased accuracy and range in distance measurements with or without reflectors, incorporating the new optical design, the enhanced signal processing algorithm, as well as the ultra-high signal modulation frequencies of up to 468.75MHz. The RED-tech 800 provides measurement accuracy of 1.5mm + 2ppm with 360° prisms or standard prisms, and 2mm + 2ppm without a reflector. It measures up to 6,000m (19,680ft.) distance with a single prism, and up to 800m (2,620ft.) without a reflector.The reflectorless measurements of up to 1,000m (3,280ft.) range is possible when the brightness at object surface is 500 lux or less, regardless of ambient brightness conditions.

RED-tech 800

SRX

SRX1X SRX2X SRX3X SRX5X

SPECIFICATIONS

Model		SRX1X	SRX2X	SRX3X	SRX5X
Angle measurement		Absolute rotary encoder scanning. Both circles adopt diametrical detection.			
Accuracy (ISO17123-3:2001)		1" (0.3mgon)	2" (0.6mgon)	3" (1mgon)	5" (1.5mgon)
IACS (Independent Angle Calibration System)		Provided		-	
Dual-axis compensator	Working range	±4' (±74mgon)			
Distance measurement		Modulated laser, phase comparison method			
Laser output*1		Reflectorless mode: Class 3R, Prism/Sheet mode: Class 1			
Measuring range*2	1 AP prism	1.3 to 5,000m (4.3 to 16,400ft.) / to 6,000m (to 19,680ft.) under good conditions*3			
	ATP1/ATP1S 360° Prism	1.3 to 1,000m (4.3 to 3,280ft.)			
	Reflective sheet target	1.3 to 500m (4.3 to 1,640ft.) with RS90N-K (90x90mm) reflective sheet			
	Reflectorless*4	0.3 to 800m (1 to 2,620ft.) / 0.3 to 1,000m (1 to 3,280ft.)*5			
Accuracy*2 (ISO17123-4:2001) (D=measuring distance)	Prism	(1.5 + 2ppm x D)mm			
	Reflective sheet target	(2 + 2ppm x D)mm			
	Reflectorless*4	(2 + 2ppm x D)mm : 0.3≦D≦200m (1≦D≦650ft.)			
		(5 + 10ppm x D)mm : 200<D≦350m (650<D≦1,140ft.)			
		(10 + 10ppm x D)mm : 350<D≦1,000m (1,140<D≦3,280ft.)			
Motor drive		DC motor drive with self-locking free rotation system			
Rotation speed at 20°C (68°F)		Max. 60°/s, Rotation time: approx. 7s for 180° rotation			
Auto-Tracking / Auto-Pointing		Pulse laser transmitter and CMOS detector with co-axial optics			
Range	AP prism	1,000m (3,280ft.)			
	ATP1/ATP1S 360° Prism	600m (1,960ft.)			
	Reflective sheet target	5 to 50m (16.4 to 160ft.); Auto-Pointing only			
Interface and Data management					
Operating system		Windows CE Ver.5.0			
Display / Keyboard		3.7in. transmissive TFT color LCD / 32 keys with backlight			
Data storage		750MB internal memory, CF card, SD card, USB flash memory			
Interface		USB1.1 Host (Type A) and Client (Type miniB) / RS-232C			
Bluetooth wireless modem (option)		Ver.1.2, Class 1 (built into RC-TS3 and H-BT1 handles)			
General					
Dust and water protection		IP64 (IEC 60529:2001)			
Operating temperature		-20 to +50ºC (-4 to +122ºF)			
Size (single display models with RS-TS3 handle and battery)		W201 x D202 x H375mm (W8.0 x D8.0 x H14.8in.)			
Weight (single display models with RS-232C handle and battery)		7.6kg (16.8 lb.)			

*1 IEC60825-1: Ed.2.0:2007 / FDA CDRH 21 CFR Part 1040.10 and 1040.11
*2 Under average conditions: Slight haze, visibility about 20km (12 miles), sunny periods, weak scintillation.
*3 Under good conditions: No haze, visibility about 40km (25 miles), overcast, no scintillation.
*4 Kodak Gray Card white side (90% reflective). Reflectorless range/accuracy may vary according to measuring objects, observation situations and environmental conditions.
*5 When brightness at object surface is 500 lux or less, regardless of ambient brightness conditions.

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