

SOKKIA



SRX

• *New*
Auto-Tracking Technology

• *New*
Motor Drive Mechanism

• *1000m (3280ft)*
Reflectorless Measurement



New Generation

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.



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 +50°C (-4 to +122°F)			
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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