

SOKKIA



# SRX

• *New*  
*Auto-Tracking Technology*

• *New*  
*Motor Drive Mechanism*

• *1000m (3280ft)*  
*Reflectorless Measurement*



# New Generation

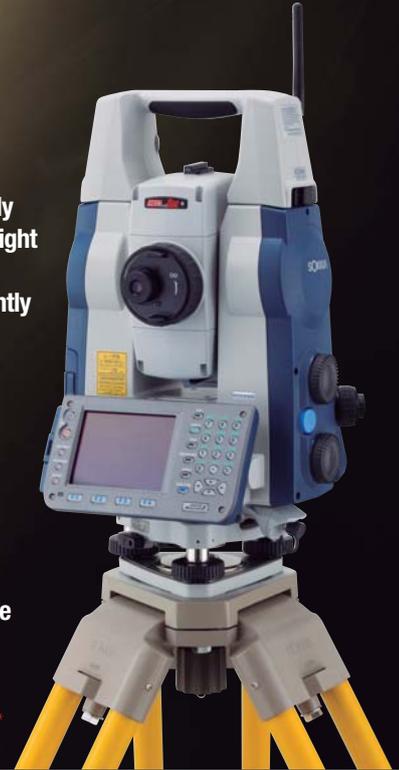
# The New SRX Features Innovative Auto-Tracking and EDM Technologies that Maximize the Robotic Surveying Capability

## 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
<b>Angle measurement</b>	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)			
<b>Distance measurement</b>	Modulated laser, phase comparison method			
Laser output <sup>1</sup>	Reflectorless mode: Class 3R, Prism/Sheet mode: Class 1			
Measuring range <sup>2</sup>	1 AP prism	1.3 to 5,000m (4.3 to 16,400ft.) / to 6,000m (to 19,680ft.) under good conditions <sup>3</sup>		
	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 <sup>4</sup>	0.3 to 800m (1 to 2,620ft.) / 0.3 to 1,000m (1 to 3,280ft.) <sup>5</sup>		
Accuracy <sup>2</sup> (ISO17123-4:2001) (D=measuring distance)	Prism	(1.5 + 2ppm x D)mm		
	Reflective sheet target	(2 + 2ppm x D)mm		
	Reflectorless <sup>4</sup>	(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.)		
<b>Motor drive</b>	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			
<b>Auto-Tracking / Auto-Pointing</b>	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		
<b>Interface and Data management</b>				
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)			
<b>General</b>				
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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