

Product Type		Auto-Pointing Model				Auto-Tracking Model			
Model		SX-101P	SX-102P	SX-103P	SX-105P	SX-101T	SX-102T	SX-103T	SX-105T
Auto-Tracking / Auto-Pointing									
Auto-Tracking		-	-	-	-	●	●	●	●
Auto-Pointing		●	●	●	●	●	●	●	●
Rotation speed / Auto Tracking speed		85°/sec (at 20°C) / 20°/sec							
Operating range		ATP1/ATP1S 360° Prism: 2m to 600m (6.6 to 1,969ft.), CP01 mini prism: 1.3 to 700m (4.3 to 2,297ft.), OR1PA mini prism: 1.3 to 500m (4.3 to 1,640ft.), AP prism: 1.3m to 1,000m (4.3 to 3,281ft.)							
Angle Measurement		Rotary absolute encoder scanning.							
Minimum Reading		0.5"/1"		1"/5"		0.5"/1"		1"/5"	
Angle Measurement		1"	2"	3"	5"	1"	2"	3"	5"
Tilt Compensation		Dual Axis, Compensation Range: ±6'							
Distance Measurement		Rotary absolute encoder scanning.							
Prism	Measuring Range	ATP1/ATP1S 360° Prism: 1.3m to 1,000m (4.3 to 3,281ft.), CP01 mini prism: 1.3 to 2,500m (4.3 to 8,200ft.), OR1PA mini prism: 1.3 to 500m (4.3 to 1,640ft.), AP prism: 1.3m to 6,000m (4.3 to 19,685ft.) under good conditions*1							
	Accuracy	±(1.5mm + 2ppm x D)mm (D=measuring distance in mm)							
Reflective sheet target	Measuring Range*3	1.3m to 500m (4.3 to 1,640ft.) with RS90N-K reflecting sheet							
	Accuracy*3	±(2mm + 2ppm x D)mm							
Reflectorless	Measuring Range*2	0.3m to 1,000m (1 to 3,281ft.) under good conditions*1							
	Accuracy*2	±(2mm + 2ppm x D)mm							
Interface and Data management									
Operating System / Processor		Windows® Embedded CE.6.0							
Display		3.5 inch / Transmissive TFT QVGA color LCD							
Memory		500MB internal memory, USB flash memory (up to 8GB)							
Interface		USB2.0 (Type A/mini B) / RS-232C							
Wireless Communication									
Bluetooth® Class 1,		Communication range: 600m (1,969ft.)*4							
General									
Dust/Water Protection		IP65 (IEC 60529:2001)							
Operating Temperature		-20°C to +50°C							
Laser Pointer		Coaxial red laser pointer using EDM measuring beam, Class 3R laser							
Guide light		Green and Red LED, Working range: 1.3m to 150m (4.3 to 492ft.)							
Size		W230 x D207 x H393mm (W9.1 x D8.2 x H15.5in.)							
Weight		Approx. 6.9kg (15.2 lb.)							
Power Supply									
BDC70 standard battery		7.2V, 5.2Ah							
Operating time		Approx. 4 hours*5							
Signal source / Laser output		Red laser diode (690nm) / Reflectorless mode: Class 3R, Prism / Sheet mode: Class 1 equivalent							

RC-PR5 Remote Control System (Optional of Auto-Collimating Model)	
Operating range (slope distance)	Far mode: 2m to 300m (6.6 to 984ft.) / Standard mode: 2m to 100m (6.6 to 328ft.)
Measuring time	15 sec

*1 Condition 1: No haze with visibility about 40km, overcast with no heat shimmer.
 *2 Fine mode. With Kodak Gray Card White Side (90% reflective). When brightness on measured surface is 30,000 lx. or less. Reflectorless range/accuracy may vary according to measuring objects, observation situations and environmental conditions.
 *3 When the measuring beam's incidence angle is within 30° in relation to the reflective sheet target.
 *4 Wireless communication range may vary depending on obstruction and other environmental conditions.
 *5 In continuous face-1 and face-2 observations by using Auto-Collimating.

Standard Accessories

- SX main unit ●Battery (BDC70)
- Battery charger (CDC68)
- Power Cable ●Lens cap ●Lens hood
- Tool pouch ●Screwdriver
- Lens brush ●Adjusting pin x2
- Cleaning cloth ●Operation manual
- USB memory ●Laser caution sign-board
- Carrying case ●Carrying strap



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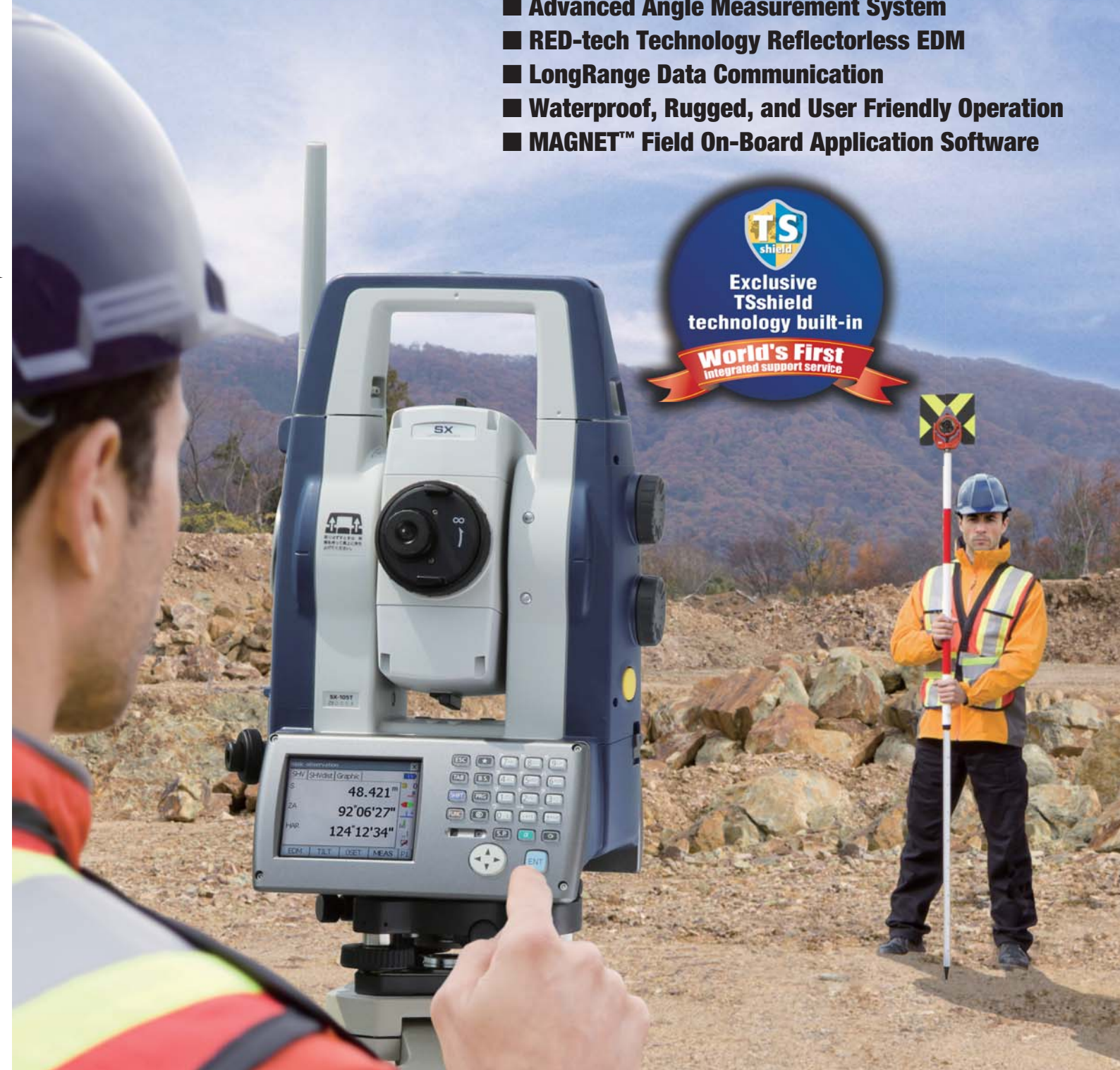
Your local Authorized Dealer is:



SX Series
 Superior X-ellence Station

Automatic Precision

- Superior Auto-Pointing Technology
- Advanced Angle Measurement System
- RED-tech Technology Reflectorless EDM
- LongRange Data Communication
- Waterproof, Rugged, and User Friendly Operation
- MAGNET™ Field On-Board Application Software



Rapidly Points. Accurately Measures.

■ Superior Auto-Pointing Technology



Incorporating cutting-edge laser and image processing technologies, the SX provides extremely reliable auto-pointing capability. Even in dense woods or in dim conditions, the SX rapidly finds a prism and accurately measures its position, ensuring maximum work efficiency under all job site environments. The SX provides a wide auto-pointing range from 1.3m to 1,000m with a standard prism.



● Simple and Easy

Point the SX in the general direction of the prism, press the trigger key, and the SX automatically points to the prism center. This enables even a beginner to rapidly take accurate measurements.

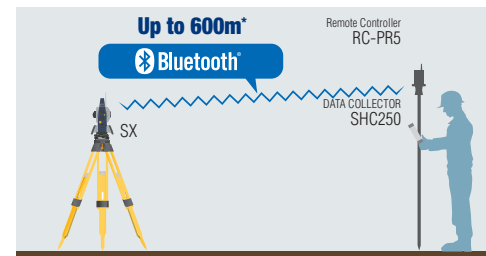
● Faster, Less Effort

By eliminating the need for the focusing telescope and adjusting fine motion screws, the SRX dramatically increases survey speed.

SX Auto-Pointing Model	Rough Aiming	Auto-Pointing - Measure	Record Data	1/2 the Steps!		
Manual Total Station	Rough Aiming	Focus	Adjust Hz		Adjust V	Measure

■ Auto-Tracking Model feature

● LongRange Data Communication



- The SX series of total stations features Bluetooth® Class1 wireless technology for reliable data communications.
- All SX data is instantly available at the Bluetooth-equipped controller.

* Wireless communication range may vary depending on obstruction and other environmental conditions.

■ Advanced Angle Measurement System

- SX features SOKKIA's original absolute encoders that provide long-term reliability in any job site condition. Dual-axis compensator ensures stable measurements even when setup on uneven terrain.



- SX-101 and 102 feature groundbreaking IACS (Independent Angle Calibration System) technology for extremely reliable angle measurements.

■ RED-tech Technology Reflectorless EDM

- Fast distance measurement of 0.9s regardless of object.
- SOKKIA traditional pinpoint precision in reflectorless distance measurement.
- Reflectorless operation from 30cm to 800m.
- Coaxial EDM beam and laser-pointer provide fast and accurate aiming.
- Ensures accuracy even with reflective sheets.

● Ultra-Narrow Laser Beam

Ultra-narrow red laser beam is also used for the laser pointer, ensuring exceptional pinpoint precision in reflectorless measurement.

Measuring beam spot size (reflectorless mode)

Distance	10m (33ft.)	40m (131ft.)	100m (328ft.)	300m (984ft.)	500m (1,640ft.)
Beam spot size (height x width)	7 x 9mm (0.28 x 0.35in.)	14 x 14mm (0.55 x 0.55in.)	29 x 24mm (1.14 x 0.94in.)	76 x 56mm (2.99 x 2.2in.)	123 x 89mm (4.84 x 3.5in.)



● RC-PR5 Remote Control System

The RC-PR5 On-Demand Remote allows for rapid prism search regardless of your position. A built-in directional sensor constantly monitors the prism movement so the SX can turn left or right whichever direction is closer.

● Precision 360° Prisms

Advanced 6-prism configuration provides unsurpassed measurement precision due to a minimum offset of each prism center. ATP1 fits a range pole; ATP1S sliding prism is designed for a pin pole.



ATP1 360° Prism



ATP1S sliding prism

■ Waterproof, Rugged, and Operator Friendly

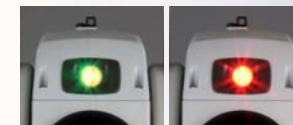
- IP65 dustproof / waterproof rating.
- Metal chassis and heavy duty handle.
- Standard usage temperature range -20 to +50°C.



- New star key [★] instantly brings up functions.
- Trigger key lets you take a series of measurements without taking your eye off the telescope.
- Control panel consists of 10-key board with color LCD touch screen display.
- USB type A / mini B as well as serial ports.



- Green / Red telescope guide lights provide efficient guidance in a range up to 150m.



■ MAGNET™

● Cloud-based Solutions for Precise Positioning

MAGNET™ is a software family that uses the "cloud" to seamlessly connect the field and office for data exchange, communications, asset tracking and more.. Real-time connections. When you need it. Where you need it.

● MAGNET™ Field

Data collection, stakeout, roads, and coordinate geometry.



MAGNET™ Field



TSshield

An industry first! New function to protect your investment

TSshield is a standard feature on all new model SOKKIA total stations. Its advanced communication system provides new opportunities to secure and maintain your instrument.

*For more detail of TSshield, please refer to the TSshield's leaflet.

