

Provided by Xpert Survey Equipment
Click Sokkia CX-101 for Product Info and Updated Pricing

CX Series

CX-101/CX-102/CX-103/CX-105/CX-107

SPECIFICATIONS

Total Stations		CX-101	CX-102	CX-103	CX-105	CX-107
Model						
Telescope						
Magnification / Resolving power		30x / 2.5"				30x / 3.5"
Others		Length: 171mm (6.7in.), Objective aperture: 45mm (1.8in.) (48mm (1.9in.) for EDM), Image: Erect, Field of view: 1°30' (26m/1,000m), Minimum focus: 1.3m (4.3ft.), Reticle illumination: 5 brightness levels				
Angle measurement						
Display resolution		0.5" / 1" (0.0001 / 0.0002gon, 0.002 / 0.005mil)	1" / 5" (0.0002 / 0.001gon, 0.005 / 0.02mil)			
Accuracy (ISO 17123-3:2001)		1"	2"	3"	5"	7"
IACS (Independent Angle Calibration System)		Provided				
Dual-axis compensator / Collimation compensation		Dual-axis liquid tilt sensor, working range: ±6' (±111mgon) / Collimation compensation available				
Distance measurement						
Laser output ^{*1}		Reflectorless mode: Class 3R / Prism / sheet mode: Class 1				
Measuring range	Reflectorless ^{*3}	0.3 to 500m (1.0 to 1,640ft.)				
(under average conditions ^{*2})	Reflective sheet ^{*4/*5}	RS90N-K: 1.3 to 500m (4.3 to 1,640ft.) RS50N-K: 1.3 to 300m (4.3 to 980ft.), RS10N-K: 1.3 to 100m (4.3 to 320ft.) CP01: 1.3 to 2,500m (8,200ft.), OR1PA: 1.3 to 500m (1,640ft.)				
	Mini prisms	1.3 to 4,000m (4.3 to 13,120ft.) / Under good conditions ^{*6} : 5,000m (16,400ft.)				
	One AP prism	to 5,000m (16,400ft.) / Under good conditions ^{*6} : to 6,000m (19,680ft.)				
	Three AP prisms	to 5,000m (16,400ft.) / Under good conditions ^{*6} : to 6,000m (19,680ft.)				
Display resolution		Fine/Rapid: 0.001m / 0.01ft. / 1/8in. Tracking: 0.01m / 0.1ft. / 1/2in.				
Accuracy (ISO 17123-4:2001) (D=measuring distance in mm)	Reflectorless	0.3 to 200m: (3 + 2ppm x D) mm, over 200 to 350m: (5 + 10ppm x D) mm over 350 to 500m: (10 + 10ppm x D) mm				
	Reflective sheet	(3 + 2ppm x D) mm				
	AP/CP prism	(2 + 2ppm x D) mm				
Measuring time ^{*7}		Fine: 0.9s (initial 1.7s), Rapid: 0.7s (initial 1.4s), Tracking: 0.3s (initial 1.4s)				
Interface and Data management						
Display / Keyboard		Graphic LCD, 192 x 80 dots, backlight, contrast adjustment / Alphanumeric keyboard / 25 keys with backlight				
Control panel location ^{*8}		On both faces				On one face
Trigger key		On right instrument support				
Data storage	Internal memory	Approx. 10,000 points				
	Plug-in memory device	USB flash memory (max. 8GB)				
Interface		Serial RS-232C, USB2.0 (Type A, for USB flash memory)				
Bluetooth modem (factory option) ^{*9}		Bluetooth Class 1, Ver.2.1+EDR, Operating range: up to 300m (980ft.) ¹⁰				
General						
Laser-pointer ^{*11}		Coaxial red laser using EDM beam				
Guide light ^{*11}		Green LED (524nm) and Red LED (626nm), Operating range: 1.3 to 150m (4.3 to 490ft.), Class 1 LED				
Levels	Graphic	6' (inner circle)				
	Circular level	10' / 2mm				
Optical plummet		Magnification: 3x, Minimum focus: 0.3m (11.8in.) from tribrach bottom				
Laser plummet (option)		Red laser diode (635nm±10nm), Beam accuracy: ≤1.0mm@1.3m, Class 2 laser product				
Dust and water protection		IP66 (IEC 60529:2001)				
Operating temperature ^{*12}		-20 to +50°C (-4 to +122°F) ^{*2}				
Size with handle ^{*8}		Control panel on both faces: W191 x D181 x H348mm (W7.5 x D7.1 x H13.7in.) Control panel on one face: W191 x D174 x H348mm (W7.5 x D6.9 x H13.7in.)				
Weight with handle and battery		Approx. 5.6kg (12.3 lb.)				
Power supply						
Battery	BDC70 detachable battery	Li-ion rechargeable battery				
Operating time (20°C)	BDC70	Approx. 36 hours (single distance measurement every 30 seconds)				
	External battery (option)	BDC60: approx. 44 hours, BDC61: approx. 89 hours (single distance measurement every 30 seconds)				

*1 IEC60825-1 Ed:2.0:2007 / FDA CDRH 21 CFR Part 1040.10 and 11 *2 Average conditions: Slight haze, visibility about 20km (12 miles), sunny periods, weak scintillation. *3 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. *4 When the measuring beam's incidence angle is within 30° in relation to the reflective sheet target. *5 Measuring range in temperatures of -30 to -20°C (-22 to -4°F) with Low Temperature models and 50 to 60°C (122 to 140°F) with High Temperature models: RS90N-K: 1.3 to 300m (4.3 to 980ft.), RS50N-K: 1.3 to 180m (4.3 to 590ft.), RS10N-K: 1.3 to 60m (4.3 to 190ft.) *6 Good conditions: No haze, visibility about 40km (25 miles), overcast, no scintillation. *7 Typical, under good conditions. Reflectorless measurement time may vary according to measuring objects, observation situations and environmental conditions. *8 Control panel location may vary depending on region or model. *9 Usage approval of Bluetooth wireless technology varies according to country. Please consult your local office or representative in advance. *10 No obstacles, few vehicles or sources of radio emissions/interference in the near vicinity of the instrument, no rain. *11 The laser-pointer and the guide light do not work simultaneously. *12 Low Temperature models: -30 to 50 °C (-22 to 122°F) and High Temperature models: -20 to 60°C (-4 to 140°F, No direct sunlight) are available on built-to-order basis.

Standard Accessories

- CX main unit ● Battery (BDC70) ● Battery charger (CDC68) ● Power Cable (EDC113) ● Lens cap ● Lens hood ● Tool pouch
- Screwdriver ● Lens brush ● Adjusting pin x2 ● Cleaning cloth ● Operation manual ● USB memory key ● Laser caution sign-board ● Carrying case ● Carrying strap



SOKKIA SINGAPORE POSITIONING SALES PTE LTD

60 ALEXANDRA TERRACE, #08-07
THE COMTECH SINGAPORE 118502
PHONE : +65 6479 3966 FAX : +65 6479 4966
WEBSITE : www.sokkia.com.sg
COMPANY REG. NO. : 201007531Z

www.topcon.co.jp

Specifications subject to change without notice

©2011 Topcon Corporation All rights reserved.

-Bluetooth® word mark and logos are registered trademarks of Intel Corporation, Inc. and any use of such marks by Topcon is under license. Other trademarks and trade names are those of their respective owners.

-Designs and specifications are subject to change without notice.
-Product colors in this brochure may vary slightly from those of the actual products owing to limitations of the printing process.

Your local Authorized Dealer is:

SOKKIA

CX Series

Reflectorless Total Stations

Tradition Meets Innovation

- LongLink™ data communications *
- Advanced angle measurement systems
- Super-long battery life
- Waterproof, rugged, and operator friendly

*Factory option

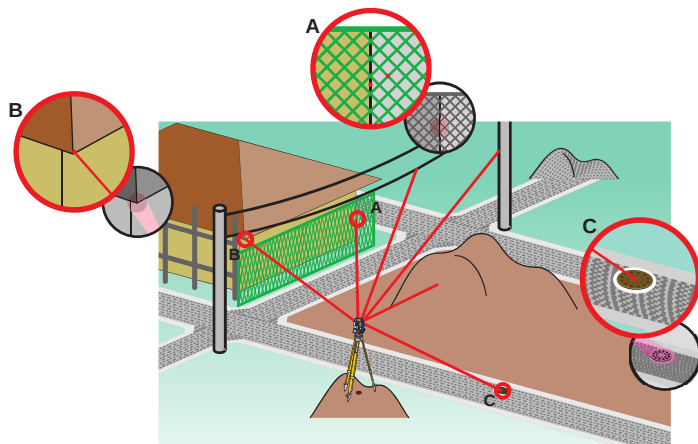


The CX maintains SOKKIA's tradition for accuracy and quality while setting new standards in total stations.

■ RED-tech technology reflectorless EDM

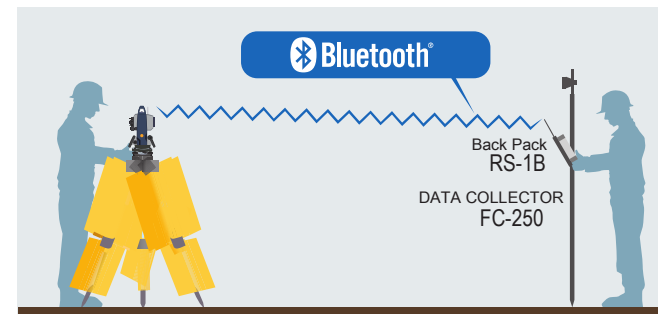


- Fast distance measurement of 0.9s regardless of object.
- SOKKIA traditional pinpoint precision in reflectorless distance measurement
- Reflectorless operation from 30cm to 500m.
- Coaxial distance measurement and laser-pointer with same light source.
- Ensures accuracy even with reflective sheets.



The ultra-narrow laser beam can measure precisely walls, corners, manholes on the road surface, even chain-link fences and tree branches.

■ LongLink Data Communication *1



- The CX series of total stations features Bluetooth Class1 **1 wireless technology for reliable data communications up to 300m **2.
- All CX data is instantly available at the Bluetooth-equipped controller.
- Eliminate the frustration of hand-signals and errors on all mid-range layout, staking, and other jobs.

*1 Factory option

*2 No obstacles, few vehicles or sources of radio emissions/interference in the near vicinity of the instrument, no rain.

■ Advanced Angle Measurement System

- CX 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.
- Sokkia's traditional motion clamp and tangent screw are employed to ensure stable angle measurement.
- CX101 and CX102 feature groundbreaking IACS (Independent Angle Calibration System) technology for extremely reliable angle measurement.



■ Unprecedented Battery Life 36 Hours!

- The CX single battery can last up to 36 hours.*
- Greatly reduces likelihood of low power during any full-days work
- Eliminates the need for nightly recharging or carrying extra batteries.



*Operating time will vary depending upon environmental conditions and CX activity.

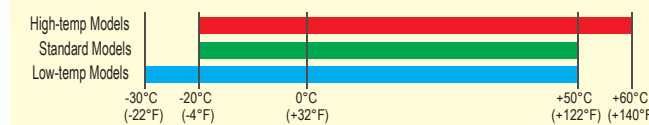
■ Waterproof, rugged, and operator friendly

- IP66 dustproof / waterproof rating.
- Metal chassis and heavy duty handle add ruggedness.
- Standard usage temperature range -20° to +50°C. Low temperature models can be used as low as -30** and high temperature models up to 60°C.*



* Low and High temperature models available as options.

Operating temperature range



- Environmentally protected USB port provides added security, as well as added convenience and data storage and transfer.



- One-touch star key [★] offers instant access to functions.



- Conveniently located "trigger" key lets you take a series of measurements with the push of a button without taking your eye off the telescope.



- Control panel features large 10-key pad with LCD that provides optimum viewing and convenience.*



*Control panel location may vary depending on region or model.

- Green/red telescope guide light enhances work efficiency in a range up to 150m.



- Built-in laser plummet with five brightness levels is equipped for quick instrument setting in all lighting conditions.

