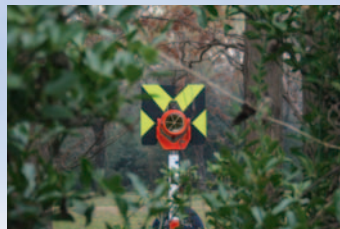


**SOKKIA**

**DX Series**  
Direct Aiming 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



### Direct aiming X-ellence station

Model	DX-101AC	DX-102AC	DX-103AC	DX-105AC
<b>Telescope</b>				
Magnification / Resolving power	30x / 2.5"			
Length: 168mm (6.6in.), Objective aperture: 45mm (1.8in.) (50mm (2.0in.) for EDM), Image: Erect, Field of view: 1°30' (26m/1,000m), Minimum focus: 1.3m (4.3ft.), Reticle illumination: 5 brightness levels				
<b>Angle measurement</b>				
Display resolutions (selectable)	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"
IACS (Independent Angle Calibration System)	Provided		-	
Dual-axis compensator / Collimation compensation	Dual-axis liquid tilt sensor, working range: ±6' / Collimation compensation available			
<b>Distance measurement</b>				
Laser output <sup>1</sup>	Reflectorless mode: Class 3R / Prism/sheet mode: Class 1			
Measuring range (under average conditions <sup>2</sup> )	Reflectorless <sup>3</sup> Reflective sheet <sup>4</sup>	0.3 to 800m (2,620ft) / Under good conditions <sup>5</sup> : to 1,000m (3,280ft.)		
	Mini prisms One AP prism Three AP prism	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.) 1.3 to 5,000m (4.3 to 16,400ft) / Under good conditions <sup>5</sup> : 6,000m (16,680ft.) to 8,000m (26,240ft.) / Under good conditions <sup>5</sup> : to 10,000m (32,800ft.)		
Display resolution	Fine/Rapid: 0.001m / 0.01ft. / 1/8in. Tracking: 0.01m / 0.1ft. / 1/2in.			
Accuracy <sup>2</sup> (ISO 17123-4:2001) (D=measuring distance in mm)	Reflectorless <sup>3</sup> Reflective sheet <sup>4</sup> AP/CP prism	(2 + 2ppm x D) mm <sup>6</sup> (2 + 2ppm x D) mm (1.5 + 2ppm x D) mm		
Measuring time <sup>7</sup>	Fine: 0.9s (initial 1.5s), Rapid: 0.6s (initial 1.3s), Tracking: 0.3s (initial 1.3s)			
<b>Motor drive system</b>				
Type	DC Servo motor			
Max Rotation speed	70°/sec			
<b>Auto Pointing</b>				
Working range <sup>2</sup>	One AP prism <sup>8</sup> Reflective sheet <sup>9</sup> 360° prism <sup>10</sup> Mini prisms <sup>11</sup>	1.3 to 1,000m 5 to 50m 2 to 600m CP01: 1.3 to 700m, OR1PA 1.3 to 500m		
<b>OS, Interface and Data management</b>				
Operating system / Application	Microsoft Windows CE 6.0 / MAGNET FIELD			
Display / Keyboard	3.5inch, Semi-transmissive TFT QVGA color LCD with LED backlight, Touch screen, Automatic brightness control / 26 keys with backlight			
Control panel location <sup>12</sup>	On both faces (Face 2 is only touch screen display)			
Trigger key	On right instrument support			
Data storage	Internal memory Plug-in memory device	500MB internal memory USB flash memory (max. 8GB)		
Interface	Serial RS-232C, USB2.0 (Type A / miniB)			
Bluetooth modem (option) <sup>13</sup>	Bluetooth Class 1, Ver.2.1+EDR, Operating range: up to 300m (980ft.) <sup>14</sup>			
<b>General</b>				
Laser-pointer <sup>15</sup>	Coaxial red laser using EDM beam			
Guide light <sup>15</sup>	Green LED (524nm) and Red LED (626nm), Operating range: 1.3 to 150m (4.3 to 490ft.)			
Levels	Graphic Circular level	6' (Inner Circle) 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	IP65 (IEC 60529:2001)			
Operating temperature	-20 to +50°C (-4 to +122°F)			
Size with handle	W207 (W) X 190 (D) X 372 (H) mm (W8.1 x D7.5 x H14.6in.)			
Weight with battery & tribrach	Approx. 6.1kg (13.4lb.)			
<b>Power supply</b>				
Battery	BDC70 detachable battery	Li-ion rechargeable battery		
Operating time (20°C)	BDC70 External battery (option)	Approx. 5hours (Fine distance measurement (single) using Auto Pointing, repeated every 30 seconds) BDC60: approx. 7hours, BDC61: approx. 14.5hours (Fine distance measurement (single) using Auto Pointing, repeated 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. Reflectivity 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 Good conditions: No haze, visibility about 40km (25 miles), overcast, no scintillation. \*6 Measuring range: 0.3 to 200m \*7 Typical, under good conditions. Reflectorless measurement time may vary according to measuring objects, observation situations and environmental conditions. \*8 AP01 prism \*9 When using a reflective sheet for Auto Pointing, the size of sheet (10 to 90 mm) must be selected to correspond to the distance being measured. Use smaller reflective sheets for shorter distances. Figures when the Auto Pointing beam strikes within 15° of the reflective sheet target. \*10 ATP1(S) prism \*11 OR1PA prism \*12 Control panel location may vary depending on region or model. \*13 Usage approval of Bluetooth wireless technology varies according to country. Please consult your local office or representative in advance. \*14 No obstacles, few vehicles or sources of radio emissions/interference in the near vicinity of the instrument, no rain. \*15 The laser-pointer and the guide light do not work simultaneously.

### Standard Accessories

- DX main unit ●Battery x2 (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 x2



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