

# SOKKIA

# NET05AXII

# NET1AXII

3D Station

## Ultra High-precision 3D Stations for Accurate Measurements in Industrial and Monitoring Applications



- Ultra High-precision Distance Measurement
- Precise Angle Accuracies 0.5" (NET05AXII) / 1" (NET1AXII)
- 1" Auto Pointing Accuracy \*
- Remote Control through on-line PC
- Exclusive Reflector Prescan Technology
- Enforced Durability for Long Term Deformation / Monitoring Applications

\* When measured with standard prism

# NET05AXII/NET1AXII

## SPECIFICATIONS

### 3D Station

Model		NET05AXII	NET1AXII
<b>Telescope</b>			
Magnification / Resolving power		30x / 2.5"	
Objective aperture: 45mm (1.8 in.) (50mm (2.0 in.) for EDM), Image: Erect, Field of view: 1°30' (26 m/1,000 m), Minimum focus: 1.3 m (4.3 ft.),			
<b>Angle measurement</b>			
Display resolutions (selectable)		0.1" / 0.5" (0.00002 / 0.0001 gon, 0.0005 / 0.002 mil)	
Accuracy (ISO 17123-3:2001)		0.5"	1"
Dual-axis compensator / Collimation compensation		Dual-axis liquid tilt sensor, working range: ±6' / Collimation compensation available	
IACS (Independent Angle Calibration System)		Provided	
<b>Distance measurement</b>			
Laser output <sup>1</sup>		Reflectorless mode: Class 3R / Prism/sheet mode: Class 1	
Measuring range (under good conditions <sup>2</sup> )	One prism <sup>3</sup>	1.3 to 3,500 m (4.3 to 11,480 ft.)	
	Reflective sheet RS50N-R <sup>4</sup>	1.3 to 200m (4.3 to 640 ft.)	
	Reflectorless <sup>5</sup>	0.5 to 100 m (1.64 to 320 ft.)	0.5 to 400 m (1.64 to 1,310 ft.)
Minimum display		0.00001 m / 0.0001 m (0.0001 ft. / 0.001 ft., 1/64 in. / 1/16 in.)	0.0001 m / 0.001 m 0.001 ft. / 0.01 ft., 1/16 in. / 1/8 in.)
Accuracy (ISO 17123-4:2001) (D=measuring distance in mm)	Prism <sup>3</sup>	(0.8 + 1ppm x D) mm	(1 + 1ppm x D) mm
	Reflective sheet <sup>4</sup>	(0.5 + 1ppm x D) mm	(1 + 1ppm x D) mm
	Reflectorless <sup>5</sup>	(1 + 1ppm x D) mm	(2 + 1ppm x D) mm <sup>6</sup>
Measuring time (Fine mode) <sup>7</sup>		0.9s (initial 1.5s)	
<b>Motor</b>			
Type		DC motor drive	
Rotation speed		85°/s	
<b>Auto-Collimating</b>			
Working range (under average conditions <sup>8</sup> )	One prism	1.3 to 1,000 m (4.3 to 3,280 ft.)	
	Reflective sheet RS50N-R <sup>9</sup>	5 to 50m (16 to 160ft.)	
Sighting accuracy (ISO 17123-3)	prism	1" (1 mm @ 200 m)	
	Reflective sheet <sup>9</sup>	4" (1 mm @ 50 m)	
<b>OS, Interface and Data management</b>			
Operating system		Windows Embedded CE 6.0	
Display <sup>10</sup>		3.5inch, transmissive TFT QVGA color LCD with LED backlight, Touch screen, Automatic brightness control	
Keyboard <sup>10</sup>		25 keys with backlight	
Trigger key		On right instrument support	
Data storage	Internal memory	500MB (includes memory for program files)	
	Plug-in memory device	USB flash memory (up to 8 GB)	
Calendar / clock function		Provided	
Interface		Serial RS-232C, USB2.0 (Type A / miniB)	
Bluetooth modem <sup>11</sup>		Bluetooth Class 1, Ver.2.1+EDR, Operating range: up to 600m (1,960 ft.) <sup>12</sup>	
<b>General</b>			
Target searchlight		LED (white), Blink / On, selectable	
Laser-pointer		Coaxial red laser using EDM beam, ON / OFF, selectable	
Levels	Graphic	6' (Inner Circle)	
	Circular level	10' / 2 mm	
Optical plummet		Magnification: 3x, Minimum focus: 0.3m (11.8in.) from tribrach bottom	
Dust and water protection / Operating temperature		IP65 (IEC 60529:2001) / -20 to +50°C (-4 to +122°F)	
Size with handle <sup>10</sup>		Display and keyboard on one face: 230 (W) X 196 (D) X 393 (H) mm Display and keyboard on both faces: 230 (W) X 207 (D) X 393 (H) mm	
Weight with battery & tribrach <sup>10</sup>		Display and keyboard on one face: 6.8 kg (15.0 lb) Display and keyboard on both faces: 7.0 kg (15.4 lb)	
<b>Power supply</b>			
Battery		BDC72	Li-ion rechargeable battery
Operating time (20°C) <sup>13</sup>	BDC72		Approx.4 hours
	External battery (option)		BDC60: approx.7 hours, BDC61: approx.14.5 hours

\*1 IEC60825-1:Ed.2.0:2007 / FDA CDRH 21 CFR Part 1040.10 and 11 \*2 Good conditions: No haze, visibility about 40km (25 miles), overcast, no scintillation. \*3 Face the prism to the instrument during the measurement with the distance at 10 m or less. \*4 Face the reflective sheet target to the instrument. \*5 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. \*6 Measuring range: 0.5 to 200 m. \*7 Fastest time under good atmospheric conditions\*2, no compensation, EDM ALC at appropriate setting, slope distance. \*8 Average conditions: Slight haze, visibility about 20km (12 miles), sunny periods, weak scintillation. \*9 Figures when the Auto Pointing beam strikes within 15° of the reflective sheet target. \*10 Control panel and keyboard location may vary depending on region or model. \*11 Usage approval of Bluetooth wireless technology varies according to country. Please consult your local office or representative in advance. \*12 Paired with RC-PR5, with instrument height to be more than 1.5m, no obstacles (like building structures, trees or vehicles) causing interrupting/reflecting radio wave, few sources of radio emissions/interference in the near vicinity of the instrument, no rain. \*13 Fine distance measurement (single) using Auto Pointing, repeated every 30 seconds

### Standard package components

INET Main unit | Battery (BDC72) x 2 | Battery charger (CDC77) | Power cable (EDC113A/113B/113C etc.) | Stylus pen | Lens cap | Lens hood | Tool pouch | Screwdriver | Lens brush | Adjusting pin x 2 | Vinyl cover | Wiping cloth | Quick Manual | Standard package components | Precautions for Safe Operation | USB memory (Manual) | Export restrictions card (Be sure to read) | Laser caution sign-board | Carrying case | Carrying strap

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### TOPCON CORPORATION

75-1 Hasunuma-cho, Itabashi-ku, Tokyo 174-8580, Japan  
Phone: (+81)3-3558-2993 Fax: (+81)3-3960-4214  
www.topcon.co.jp

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