

SOKKIA

NET05X

3D STATION

Featuring 0.5" angle accuracy and sub-millimeter EDM, the NET05X 3D Station offers the highest precision in its class in a broad range of applications.



■ Engineering and Construction

- Setting out with maximum precision
- On-site positioning of framework members
- Periodic measurement of tunnel convergence to ensure safety



■ Industrial Measurement

- Measures dimensions and geometry with sub-millimeter accuracy
- Easy-to-set-up mobile system provides maximum convenience in large object measurement from multiple positions



■ Surveying

- NET05X provides the highest precision in its class for all kinds of surveying, from control point survey to long baseline measurement



Equipped with a variety of innovative features, the NET05X provides ideal solutions for the most demanding surveying and measurement tasks that require the highest in precision.

■ 0.5" Angle Accuracy

- The combination of market-proven absolute rotary encoders and advanced Independent Angle Calibration System (IACS) provides the industry's highest angle accuracy.

■ Sub-millimeter EDM

- SOKKIA's cutting-edge distance measurement technology ensures unmatched comprehensive performance.
- "0.5mm+1ppm" accuracy with reflective sheet targets in the range of 200m (650ft.).
- "0.8mm+1ppm" with a standard prism up to 3,500m (11,480ft.).
- "1mm+1ppm" precision without reflector up to 100m (320ft.).
- Measurement time is as fast as 2.4 seconds in "fine" mode.

■ Superior Telescope

- The superior telescope boasts 2.5" high resolving power as well as unparalleled brightness and sharpness.

■ Perfectly Aligned Laser Pointer

- Red EDM beam works as a laser pointer.
- The perfectly aligned laser can be used for precise setting out and alignment tasks indoor or underground conditions.

■ Target Illumination

- Prisms or sheet targets can be easily located in dim lighting conditions using the high-intensity white LED built into the telescope.



■ Advanced User-Interface with Windows CE

- A highly visible touch screen display and a fully illuminated keyboard allow easy operation in tunnels, at night, and in low-light conditions.
- An optional Remote Trigger DLC1 enables wireless operation.



■ IP65 Environmental Protection

- The NET05X boasts a robust IP65 dust- and water-resistant body.
- Weatherproof multi-port maintains IP65 protection even when connected to a data cable or an external battery.

■ Bluetooth® Wireless Communication

- Built-in Class 1 Bluetooth modem allows wireless communication with an external controller or PC to a range of 200m (650ft.).

■ Wide Variety of Reflectors

- SOKKIA's full line of innovative reflectors maximizes the measurement accuracy and efficiency.



Product names mentioned in this brochure are trademarks of their respective holders. The Bluetooth® word mark and logos are registered trademarks of Bluetooth SIG, Inc. Product colors in this brochure may vary slightly from those of actual products owing to limitations of the printing process. Designs and specifications are subject to change without notice.

NET05X Specifications

Telescope		Magnification: 30x, Resolving power: 2.5" Minimum focus: 1.3m (4.3ft.)"
Angle measurement		Absolute rotary encoder scanning, diametrical detection
Display resolution		0.1" / 0.5", 0.02 / 0.1 mgon, 0.0005 / 0.002 mil
Accuracy (ISO 17123-3:2001)		0.5", 0.15 mgon, 0.0025 mil
IACS		Provided (Independent Angle Calibration System)
Automatic dual-axis compensator		Working range: ±4' (±74 mgon)
Distance measurement		Modulated laser, phase comparison method with red laser diode (690nm)
Laser output*1	Reflectorless mode	Class 3R (max. 5mW)
	Prism/Sheet mode	Class 1 equivalent (max. 0.22mW)
Measuring range*2	Reflective sheet*3	1.3 to 200m (4.3 to 650ft.) (with RS50N-R)
	One AP prism	1.3 to 3,500m (4.3 to 11,480ft.)
Unit: mm)	CP compact prism	1.3 to 800m (4.3 to 2,620ft.)
	Reflectorless*4	0.3 to 100m (1.0 to 320ft.)
Unit		Meter / Foot / US foot / US foot + inch
Display resolution		0.01mm / 0.1mm, 0.0001 / 0.001ft., 1/64 / 1/16in.
Accuracy*2	Reflective sheet*3	(0.5 + 1ppm x D) mm
	AP/CP prism	(0.8 + 1ppm x D) mm
	Reflectorless*4	(1 + 1ppm x D) mm
Measuring time		Fine: <0.9s (initial <2.4s), Rapid: <0.6s (initial <2.0s) Tracking: <0.4s (initial <1.3s)
Beam spot size	Height x Width	3 x 5mm@2m, 5 x 6.5mm@10m, 11 x 9mm@40m
	(Reflectorless mode)	0.20 x 0.26 in.@32ft., 0.43 x 0.35 in.@130ft.
Interface and Data management		
Operating system		Windows CE Ver. 5.0
Display		3.5 in. TFT color LCD with backlight, touch screen, on both faces
DLC1 Remote Trigger (optional)		Infrared, Operating range: 0.5m (1.6 ft.)
Data storage		Internal memory (1MB), CF card, SD card, USB memory
Interface		Serial RS-232C / USB1.1: Type A, Type mini B
Bluetooth wireless modem		Class 1, Operating range: 200m (650ft.)
SFX data transfer		Provided
General		
Sensitivity of levels		Plate level: 20" / 2 mm, Circular level: 10' / 2 mm
Optical plummet		Magnification: 7x
Dust and water protection		IP65 (IEC 60529:2001)
Operating temperature		-20 to +50°C (-4 to +122°F)
Size with handle & battery		201 (W) x 220 (D) x 375 (H) mm (W8.0 x D8.7 x H14.8 in.)
Weight with handle & battery		7.1 kg (15.7 lb.)
Power supply		7.2 to 12 V DC
Battery	BDC58	Li-ion rechargeable battery (4.3 Ah, 2 included as standard)
Operating time*5	BDC58	Approx. 14 hours
	External battery	BDC60: Approx. 19 hours, BDC61: Approx. 38.5 hours

*1 IEC60825-1 Amd.2:2001 / FDA CDRH 21 CFR Part 1040.10 and 11

*2 Under good conditions: No haze, visibility about 40km (25 miles), overcast, no scintillation.

*3 When squarely aligned with the target.

*4 With Kodak Gray Card White Side (90% reflective). When brightness on measured surface is 30,000 lx. or less (no direct sunlight).

*5 Single measurement every 30 seconds.



www.sokkia.co.jp

75-1, HASUNUMA-CHO, ITABASHI-KU, TOKYO, 174-8580 JAPAN