

**SOKKIA**

**NET05AX**  
**NET1AX**

**AUTOMATED 3D STATIONS**

# Another Leap in Precision and Performance



# Sokkia's new Automated 3D Stations NET05AX and NET1AX feature an array of technological and functional enhancements that provide higher accuracy, higher speed, and higher work efficiency in structural monitoring and large-scale 3D measurement applications.

## ■ Auto-Pointing Accuracy

The auto-pointing accuracy to the standard prism is increased to 1", and the accuracy with a reflective sheet is also improved to 1mm@50m.

## ■ 400m Reflectorless Range (NET1AX)

The reflectorless measurement range of the NET1AX model is doubled to 400m (1,310ft.) with Kodak white side (90% reflective).

## ■ Increased Rotation Speed

Incorporating the new servo-motors and driving mechanism, the maximum rotation speed is increased by 33 percent to 60°/s. The increased rotation speed reduces the total measurement time, especially in large-scale monitoring applications.

## ■ Enlarged LCD with Automatic Brightness Control

The LCD touch-screen display is enlarged to 3.7 inches. Incorporating a built-in light sensor, the NET-AX models automatically optimize the LCD brightness level.

## ■ Reflector Prescan\* for Monitoring Setup

This function dramatically improves the initial setup efficiency for structural monitoring applications.

The NET-AX models, in combination with the external control system, automatically search the predetermined area to quickly locate the approximate positions of reflectors. This function works even in low light or dark conditions where the reflectors cannot be recognized by the human eye.

The approximate reflector positions obtained with this function greatly increase efficiency in reflector search for precise pointing.

## ■ Rapid 2D Monitoring\*

This function was specifically developed to reduce measurement time for real-time two-dimensional monitoring applications.

The NET-AX models can be operated by the external control system to quickly obtain vertical and horizontal angles, enabling faster recognition of 2D (vertical and horizontal) movements.

Employing advanced image processing technology, the NET-AX measures the vertical and horizontal angles to the reflectors located within the telescope's field of view. This function requires neither precise pointing to the reflector nor distance measurement, significantly increasing measurement speed.

Ideal for subsidence, displacement or deformation monitoring where vertical or horizontal movements are critical.

\*"Reflector Prescan" and "Rapid 2D Monitoring" are available when operating the NET via command operation from an external PC or other devices.



Model		NET05AX	NET1AX
<b>Angle measurement</b>			
Accuracy (ISO 17123-3)		0.5" (0.15mgon)	1" (0.3mgon)
Resolution		0.1" / 0.5" (0.02 / 0.1mgon)	
<b>Distance measurement</b>			
Maximum range	Reflectorless	100m (328ft.)	400m (1,310ft.)
	Reflective sheet	200m (656ft.)	300m (984ft.)
	1 prism	3,500m (11,480ft.)	3,500m (11,480ft.)
Accuracy (ISO 17123-4)	Reflectorless	1mm + 1ppm	2mm + 1ppm <sup>1</sup>
	Reflective sheet	0.5mm + 1ppm	1mm + 1ppm
	Prism	0.8mm + 1ppm	1mm + 1ppm
Resolution		0.01 / 0.1mm	0.1 / 1mm
<b>Auto-Pointing</b>			
Range	AP prism	1.3 to 1,000m (4.3 to 3,280ft.)	
	Reflective sheet	5 to 50m (16.4 to 164ft.)	
Accuracy* <sup>2</sup>	AP prism	1" (0.3mgon) (1mm@200m)	
	Reflective sheet	1mm@50m	

\*1 Up to 200m (656ft.) range.

\*2 Auto-Pointing accuracy is verified using the methods specified by ISO 17123-3.

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