

The first targetless laser
position reference sensor

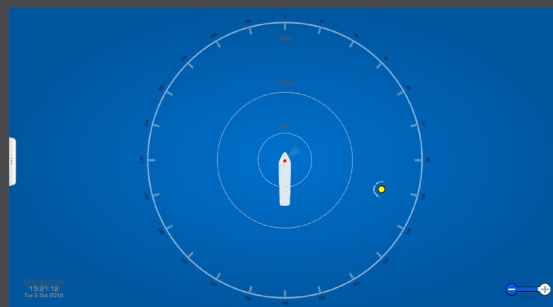
SCENESCAN
Positioning Technology From
GUIDANCE



Guidance Marine has developed a new version of its targetless laser sensor which is specially designed for use on wind farm Service Operation Vessels (SOV's). The new version of the software allows the sensor to measure range and bearing to the offshore wind turbine without the use of targets.

Benefits:

- No expenditure on targets
- No targets so no maintenance costs of targets
- Faster vessel turnaround times
- Monopole tracking gives much greater positioning robustness for wind farm support vessels
- Use in conjunction with RangeGuard Monopole to be completely independent of targets and fulfill 2 modes of redundancy
- Can be switched between monopole operation and other asset tracking operation with a simple switch



Delivering the future in dynamic positioning

SceneScan Monopile Specification

Sensor Details		Tracking Details	
Laser source	Pulsed laser diode, 905nm	Typical range to track TLP	200m
Laser pulsing frequency	7.5kHz	Typical position noise when station keeping at TLP	<100mm
Laser classification	Class 1M*	Typical range to track jack-up	100m
Typical max range to dark target	200m	Typical position noise when station keeping at jack-up	<100mm
Range resolution	8.5mm	Typical range to track drillship	Station keeping only
Range noise	30mm	Typical position noise when station keeping at drillship	<100mm
Beam shape	25mm beam diameter	Typical range to track monopile	200m
Wave motion compensation	Single axis gimbal, -20°, +15° absolute range	Typical position noise when station keeping at monopile	200mm

Levelling Optics	
Active axis	Single vertical axis with stepper control
Sensors	3 axis solid state gyro 3 axis solid state accelerometer

Vessel Interface	
Sensor power	85 - 264 VAC, max 130W
Sensor control electrical interface	Ethernet 100Base-T
Sensor control software	Up to 10 simultaneously connected consoles
Sensor DP feed	2 X RS422
Supported DP telegram formats	NMEA0183R NMEA0183P, ASCII17, MDL Standard, MDL Single Target, MDL Multi-Target, Artemis Mk4, Nautronix
Custom DP telegrams	BCD, Artemis, Marine Technologies, Rolls-Royce, Kongsberg

Environmental	
Operating temperature range	Min: -25°C - Max: 55°C
Ingress protection rating	IP66 rated
Standards compliance	EN60945, IEC60825

Sensor Dimensions & Weight		Flight Case Dimensions & Weight	
Width	405mm	System dimensions	680 x 570 x 780mm
Depth	407mm	System weight	61kg (with typical accessories such as computer, monitor and mouse)
Height	456mm		
Weight	25kg		

* Incapable of causing injury during normal operation unless collection optics are used



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