

TAUT WIRE – J RANGE

SHALLOW DEPTH TAUT WIRE DP REFERENCE SENSOR

System Specification

Description

Designed for use as a deck mounted DP reference System on vessels of opportunity or as a permanent installation, the SMT STW-1.0 system gives very accurate measurements of a vessel's movement referenced against the position of a 460kg depressor weight on the seabed. A constant tension, heave compensated electric driven winch positions the depressor weight on the seabed, using a full vector controlled variable speed drive for precise adjustments. Small vessel movements in all axis are measured by a gimbal head sensor and updated measurements are sent to the DP system via a programmable automation controller. A compact footprint, mobilisation ready design and multi interface outputs means the STW-1.0 system is the Taut wire system of choice for the shallow operations vessels.

Features

- Compact & lightweight design (lower transport costs)
- Fits inside a standard ISO shipping container
- Quick and easy mobilization
- Local and bridge control stations as standard (6" full colour touch HMIs)
- Max 80m Water Depth range (150m cable stored on drum)
- Integrated control panel on skid base
- No air requirements
- Both direct and converted angles can be supplied (optional)
- Multi interface output options available including:
 - Analogue/digital (4-20mA or +10/-10V, 0-10V)
 - Serial string NMEA (RS232, RS422 or 485)

Options

- Multiple spare parts packages
- Maintenance care cover
- Extended warranty (up to 5 Years)



System Specification

Specialist Marine Technologies Limited

Milldale Park, Undy, Ellon, Aberdeenshire, AB41 7PQ

Tel: +44 (0) 1651 842450 Email: info@smt-ab.com Web: www.smt-ab.com

Dimensions		Electrical Requirements	
Footprint	2.2 x 4.2m	Main supply	400-460 VAC 3-phase 50/60 Hz 45A feeder Approx. 13.5kW load
Height	2.2m	Aux control supply (UPS)	200-240 VAC single phase 50/60 Hz feed 300W
Overboard reach	3m		
Approx. weight	1300Kg		

Environmental	
Temperature Deck Equipment	
• Storage	-25 to +70° C
• Operational	-25 to +50° C – no ice*
Temperature Bridge Equipment	
• Storage	-25 to +70° C
• Operational	-20 to +50° C
Ambient Humidity Operational	
0 to 100% non-condensing	
Relative Humidity Storage	
0 to 100% non-condensing	
Ingress Protection	
• Deck equipment	IP56
• Bridge equipment	IP55
Acoustic Noise	
• Mooring	Less than 60 dBA at 1m
• Heave / Lower	Less than 80 dBA at 1m

Table of Accuracy - Water Depths and Angles

	Current 0 m / s		Current 0.5 m / s	
	10 Degrees	20 Degrees	10 Degrees	20 Degrees
40m	0.4m	1.1m	2.1m	2.9m
80m	0.35m	1.0m	2.2m	2.1m

Quoted figures are for reference only and do not factor in environmental conditions.

* Ice on the deck equipment must be removed before the equipment is operated