

350

SUBSEA CABLE TRACKING SYSTEM

# Detection and survey of tone carrying underwater cables.

With modern subsea cable systems becoming increasingly sophisticated and their deployment, recovery and repair a more exacting science, there is a need for accurate subsea cable location. The TSS 350 cable survey system has been developed to meet this requirement in a compact modular system that provides enhanced features whilst remaining easy to use.

The TSS 350 system is designed specifically for the detection and survey of tone-carrying cables. Featuring a comprehensive software display and menu structure, real-time information is presented in a clear graphical format and provided as a digital output for storage and subsequent processing.

This fully integrated system provides accurate survey data, verifying location and burial status of a cable as well as providing operators with fault location, vehicle skew angle and look-ahead information.

The TSS 350 provides today's specialist operating companies with a system that will significantly improve their subsea operations allowing cable detection at greater burial depths for a variety of applications.



- Cable location data and depth of burial data
- Cable fault location
- Vehicle skew angle data
- Look-ahead information
- Tone discrimination

## Features

- Accurate and reliable survey data with quality control envelope
- Combination of advanced DSP technology and proven tone-detection techniques
- Tone frequency discrimination



# 350

## SUBSEA CABLE TRACKING SYSTEM

### TECHNICAL SPECIFICATIONS

<b>System performance</b>  (dependent on tone – stated performance is based on 25Hz tone at 30mA current)	Vertical measurement accuracy	5cm or 5% of slant range whichever is greater  Stated accuracy applies within an envelope approximately 4.2m wide and 4.0m deep
	Maximum detection range	Cable detected at vertical range up to 10m and within a total horizontal swath width of 20m centred on the coil array
<b>Subsea electronics pod (SEP)</b>	Material	3000m hard anodised aluminium housing as standard (6000m stainless steel optional)
	Dimensions	140mm (d) x 470mm (h)
	Weight	10 Kg in air; 2 Kg in water
	SDC communication	2-wire 20mA digital current loop or 4-wire 20mA digital current loop, RS232 or RS422 via multiplexer
	ROV connection	Via 8 way impulse connection, 3m tail
	Voltage input	110V ac (input range 98-135V ac) Optional : 240V ac (input range 198-270V ac)
	Input frequency	57-63 Hz @ 100/132V 47-53 Hz @ 180/264V
<b>SDC</b>	SDC hardware	102 key keyboard, pointing device, 15" TFT, XGA monitor, standard 19" rack mounting
		Overall size (mm): 555 (w) x 455 (h) x 378 (d) inc. transit case
	Weight	34.8Kg
	Description	Pentium 4 running Windows™ 2000
	Disk size	Hard disk: 20Gb Floppy disk: 1.44Mb 3.5" DS-HD CD: 52 x Read
	Ports	6 serial, 1 USB (front)
	Interface	20mA current loop, data logger, altimeter, printer, video overlay PAL/NTSC format
	Voltage input	85-265V AC
	Input frequency	48-62 Hz
	Power consumption	250 watts (max)
	Shock resistance	Operating: better than 5g for <10ms Non-operating: better than 40g for <10ms
<b>Altimeter</b>	Dimensions	75mm (d) x 205mm (h)
	Frequency	250 kHz
	Range	Minimum 30cm – maximum 30m
	Beamwidth	9° conical
	Connection cable	4m length (optional 7m length)
	Connection to	Subsea electronics pod
<b>Depth rating</b>	All subsea components are depth-rated to 3000m	
<b>Physical</b>	Weight	Triaxial coils & mounting bar: 70 Kg
<b>Field support kit</b>	Supplied as part of the system	
<b>Warranty</b>	12 months international warranty including parts and labour	

*Due to continuous development, specifications may vary from those listed above.*

WORLD LEADERS IN MARINE NAVIGATION



**TELEDYNE TSS**  
A Teledyne Technologies Company

**Head Office:**  
1 Garnett Close,  
Greycaine Industrial Estate,  
Watford, Hertfordshire  
WD24 7GL, UK  
Tel: +44 (0)1923 470800  
Fax: +44 (0)1923 470842  
Email: tsssales@teledyne.com

**Aberdeen:**  
10 The Technology Centre,  
Aberdeen Science &  
Energy Park, Claymore Drive,  
Bridge of Don,  
Aberdeen AB23 8GD, UK  
Tel: +44 (0)1224 707081  
Fax: +44 (0)1224 707085  
Email: tsssales@teledyne.com

**Houston:**  
Hammerly Blvd,  
Suite 128,  
Houston TX 77043, USA  
Tel: +1 713 461 3030  
Fax: +1 713 461 3099  
Email: tssussales@teledyne.com