

TSS 350

CABLE TRACKING SYSTEM



GENERAL DESCRIPTION

" Cost Efficient survey operations using tone detection technology."

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 advanced 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 clearer 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.

Designed to be installed onto a wide range of subsea vehicles, the System can detect tones on a telecommunications or power cable, or an umbilical.

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

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.

Features	Benefits
<ul style="list-style-type: none"> • Good detection range • Accurate and reliable survey data with Quality Control envelope • Combination of advanced DSP technology and proven tone-detection techniques • Tone frequency discrimination 	<ul style="list-style-type: none"> • Efficient location of cables at all burial depths • Confidence in survey data and provides for efficient post-processing • Allows accurate location of all tone-carrying cables • Allows location and survey of one cable among other cables and subsea pipelines and structures

Technical Specifications:

SYSTEM PERFORMANCE

(Dependent on tone.
Stated performance is based on 25 Hz tone at 10mA 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.
Cable detected at vertical range up to 10m and within a total horizontal swath width of 20m centred on the coil array.

Maximum Detection Range

SUBSEA ELECTRONICS POD (SEP)

Dimensions

140mmØ x 460mm

Weight

In air: 10.0 kg. In water: 2.0 kg

SDC Communication

2-wire 20mA digital current loop or 4-wire 20mA digital current loop, RS232 or RS422 via multiplexer.

Voltage Input

110V a.c. (Input range 98-135V a.c.)

ROV Connection

Option: 240V a.c. (Input range 198-270V a.c.)
Via 8-way waterproof connector

SENSOR COILS

Dimensions

68mmØ x 340mm (6-off required - 2 arrays)

Weight

In air: 3.5kg each. In water: 2.4 kg each

Material

Polyurethane

Connection Cable

4.9m length (2-off required)

SURFACE DISPLAY CONSOLE (SDC)

Interface to

Communication to subsea pod, data logger, altimeter, printer, video in/out PAL format (optional NTSC). Option: Analogue output

Voltage Input

110/240V a.c.

Input Frequency

(range 100 - 132V/180-264V a.c. autoranging)
57 - 63 Hz (@ 100/132V) 47 - 53 Hz (@ 180/264V)

TSS COIL-MOUNTED ALTIMETER

Dimensions

47mmØ x 155mm

Frequency

500 kHz

Range

Min: 10cm Max: 30m

Connection Cable

4 metre length. Option: 7m length

Connection to

Subsea Electronics Pod

DEPTH RATING

All subsea components are depth rated to 3000mm. Option: 3000m

FIELD SUPPORT KIT

Supplied as part of the recommended system

