

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

- *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*

Benefits

- *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 Maximum Detection Range	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.
SUBSEA ELECTRONICS POD (SEP)	Dimensions Weight SDC Communication Voltage Input ROV Connection	140mmØ x 460mm In air: 10.0 kg. In water: 2.0 kg 2-wire 20mA digital current loop or 4-wire 20mA digital current loop, RS232 or RS422 via multiplexer. 110V a.c. (Input range 98-135V a.c.) Option: 240V a.c. (Input range 198-270V a.c.) Via 8-way waterproof connector
SENSOR COILS	Dimensions Weight Material Connection Cable	68mmØ x 340mm (6-off required - 2 arrays) In air: 3.5kg each. In water: 2.4 kg each Polyurethane 4.9m length (2-off required)
SURFACE DISPLAY CONSOLE (SDC)	Interface to Voltage Input Input Frequency	Communication to subsea pod, data logger, altimeter, printer, video in/out PAL format (optional NTSC). Option: Analogue output 110/240V a.c. (range 100 - 132V/180-264V a.c. autoranging) 57 - 63 Hz (@ 100/132V) 47 - 53 Hz (@ 180/264V)
TSS COIL-MOUNTED ALTIMETER	Dimensions Frequency Range Connection Cable Connection to	47mmØ x 155mm 500 kHz Min: 10cm Max: 30m 4 metre length. Option: 7m length 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	

