

HydroPACT 350

Subsea Cable Tracking System

Industry standard subsea cable detection

The HydroPACT 350 provides a reliable and simple method for performing accurate submarine surveys on a tone-carrying cable. It is available as a 110V system or a 240V system, both depth rated to 3,000m with a 6,000m option.

The 350 system operates in real-time and provides accurate measurements at a rate that allows integration on faster ROVs. The measurement technology used by the system also allows it to operate out of water with no degradation in performance, range or accuracy.

In surveying submarine cables, the system measures, displays and records the position of the target relative to the ROV, and its depth of cover beneath the seabed. Operation is unaffected by the burial state of the target cable, the presence of non-ferrous metallic objects, or the heading of the ROV.

The HydroPACT product family includes a surface display computer (SDC) or rack mount computer (RMC10) option. The SDC displays information from the DeepView for Windows™ software which is used to guide the ROV along the course of the target. It makes all acquired survey data available to external data logging equipment as well as also being used to configure and control the 350 system. By interpreting the signals from the subsea installation, the SDC provides a graphical display that helps guide the ROV towards the target and then track it. Simultaneously, the SDC uses one of its serial data ports to transmit the real-time survey information to an external data logging system. The RMC10 option offers a smaller footprint that communicates survey data to other equipment on-board the ROV's support vessel, eliminating the need for a separate screen module just for the 350.



PRODUCT FEATURES AND BENEFITS

- Cable location data and depth of burial data
- Cable fault location
- Vehicle skew angle data
- Look-ahead information
- Tone frequency discrimination
- Combination of advanced DSP technology and proven tone detection techniques
- Accurate and reliable survey data with quality control envelope



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HydroPACT 350

Subsea Cable Tracking System

TECHNICAL SPECIFICATIONS

System Performance	Detection range (in a low noise environment)	Cable detected at vertical range up to 10m and within a total horizontal swath width of 20m centered on the coil array The greater of 5cm or 5% slant range. Stated accuracy applies within the quality envelope of 4m. (Results measured on a cable carrying 25Hz tone frequency at 30mA current)
	Applied AC Tone	1 - 200Hz in 1Hz steps
Sensing Coil	Dimensions	68mm (ø) x 340mm (l) (6 coils arranged in two coil triads)
	Weight	3.5kg in air; 2.4kg in water (per coil)
Subsea Electronics Pod	Dimensions	148mm x (ø) x 468mm (l)
	Weight	12.7kg in air; 4.4kg in water
	SDC Communication	RS232, 2-wire 20mA digital current loop, 4-wire 20mA digital current loop
	Power input	110 or 230VAC
Surface Display Computer	Hardware	19" ruggedised touch screen panel PC Rear mounted comms for all external interfaces
	Display resolution	1280 x 1080
	Dimensions	599mm x 480mm x 345mm (including transit case)
	Power consumption	250W (max)
	Shock resistance	Operating: better than 5g for <10ms; Non-operating: better than 40g for <10ms
Altimeter	Dimensions	140mm (ø) x 290mm (h)
	Frequency	200kHz
	Range	30cm to 30m
Depth Rating	All subsea components are depth rated to 3000m as standard (6000m) option)	
Warranty	12 months international warranty including parts and labour	
Options	RMC10 (rack mount computer)	
	Extended warranty	

COMPANY WITH
MANAGEMENT SYSTEMS
CERTIFIED BY DNV
= ISO 9001 =
= ISO 14001 =
= OHSAS 18001 =

*This is an artistic representation of the proposed appearance
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HydroPACT 440

Subsea Pipe Tracking System

Industry standard subsea pipe detection

The HydroPACT 440 pipe detection system has been established for a number of years as the industry standard, providing accurate and reliable survey data, which provides the position of conductive assets on or beneath the seabed. The system is flexible in its range of uses and can be installed on a variety of vehicles for undertaking survey work.

It provides a reliable and simple method for performing accurate submarine surveys on a conductive target such as a cable or pipe.

During surveying operations on submarine pipes and cables, the system measures, displays and records the position of the target on or beneath the seabed. The technology used gives the 440 the flexibility to detect any conductive target, whether the material is exposed or buried and the burial state of the target

has no effect on system operation. The 440 system operates in real-time and provides accurate measurements at a rate that allows integration on faster ROVs. The measurement technology used also allows the 440 to operate out of water with no degradation in performance, range or accuracy.

The HydroPACT 440 is available as a 110VAC or a 230VAC system, or as a new 24VDC system. This new 24VDC version will help to increase the flexibility and use of the system on vehicles that only support DC power capability. All power options are offered in either 3000m or 6000m rated pods for both new 440 systems, while the 24Vdc option is also available.



PRODUCT FEATURES AND BENEFITS

- Pulse induction technology allows accurate survey information regardless of vehicle heading
- DSP techniques give quality control information
- Long range detection of buried subsea targets
- Simple to install with no time-consuming vehicle calibrations required
- Windows™ based display and control software
- Easy to operate
- Suitable for operations in high current environments
- Provides reliable and high integrity data
- Can survey at great range
- Less time spent during pre-operation
- Familiar easily-accessible software platform
- Intuitive interface requires less training



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HydroPACT 440

Subsea Pipe Tracking System

TECHNICAL SPECIFICATIONS

System Performance	Detection range (in a low noise environment)	2.5cm armoured cable depth and tracking at 1.2m 1cm unarmoured cable depth and tracking at 0.6m 15cm armoured cable depth and tracking at 1.8m 10" pipeline depth and tracking at 3.0m 4" pipeline depth and tracking at 2.2m 4" umbilical depth and tracking at 2.2m		
	Vertical measurement accuracy (in a low noise environment)	The greater of 5cm or 5% slant range.		
Coil Array	Dimensions	1000mm (l) x 600mm (w) (3 coils per array)		
	Weight	45.0kg in air; 14.4kg in water (coil array)		
Power Supply Unit Pod	Power input	110VAC	230VAC	24VDC
	Dimensions	148mm (Ø) x 468mm (L)	148mm (Ø) x 468mm (L)	148mm (Ø) x 328mm (L)
	Weight	13.4kg in air; 3.8kg in water	13.4kg in air; 3.8kg in water	10.0kg in air; 3.3kg in water
Subsea Electronics Pod	Dimensions	148mm (Ø) x 468mm (L)		
	Weight	14.0kg in air; 4.4kg in water		
	Communication	RS-232, 2-wire 20mA digital current loop, 4-wire 20mA digital current loop		
	Power input	110VAC or 230VAC, 24VDC (option upon order)		
Surface Display Computer	Hardware	19" ruggedised touch screen panel PC Rear mounted comms for all external interfaces		
	Display resolution	1280 x 1080		
	Dimensions	599mm x 480mm x 345mm (including transit case)		
	Power consumption	250W (max)		
	Shock resistance	Operating: better than 5g for <10ms; Non-operating: better than 40g for <10ms		
Altimeter	Dimensions	140mm (Ø) x 290mm (h)		
	Frequency	200kHz		
	Range	30cm to 30m		
Depth Rating	All subsea components are depth rated to 3000m as standard (6000m option)			
Compliance	Export	UK	No Licence Required	
		USA	ECCN: 8A992e	
Warranty	12 months international warranty including parts and labour			
Options	RMC10 (rack mount computer)			
	3, 4, 6, 8 and 10m cable length options			
	Extended Warranty			

COMPANY WITH
MANAGEMENT SYSTEMS
CERTIFIED BY DNV
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= OHSAS 18001 =



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