



HiPAP® 350P - High Precision Acoustic Positioning and underwater navigation system, portable

This is the brand new member of the HiPAP family. With its unique, new and compact transducer containing “a complete transceiver” and an accurate Motion Reference Unit, it will bring a new era into the underwater positioning services for “vessels of opportunity”. It is the only automatic beam steering portable transducer in the market. The transducer is designed to be mounted on a shaft to be installed over-the-side or through a moon-pool of a vessel.

The transducer can be tilted to have the 120 degree cone operating area in the sector of the required area. There will be no need for extra calibration, or mechanical fine adjustments, as the internal Motion Reference Unit will automatically compensate for the tilt.



Key HiPAP features

- Unique spherical transducer design with up the 241 individual elements
- Extraneous noise suppression techniques
- Extremely narrow, ± 5 degree, listening beams
- Extreme tracking range capabilities
- True Multi-User LBL function
- Comprehensive transponder range to support positioning operations
- Reference output to dynamic positioning system

TECHNICAL SPECIFICATION

Gate Valve Size Required	350 mm [14 inches]
Transducer Diameter	320 mm
Acoustic Operating System	$\pm 80^\circ$
Number of Active Elements	46
Angle Accuracy:¹	0 dB S/N: 0.40° 10 dB S/N: 0.23° 20 dB S/N: 0.18°
Range Detection Accuracy:¹	< 20 cm
Range Detection Accuracy:¹	1 to 3000m
Narrow Pointing Receiver Beam:	$\pm 7.5^\circ$

¹The specifications are based on; Line of sight from transducer to transponder, no influence from ray bending, Signal to Noise ratio as specified in water in the 250 Hz receiver band, no error from heading / roll / pitch sensors, and use of correct sound velocity. Operating ranges are typical and conservative, and are assumed by using sufficient transponder level (up to 206 dB dependant on range).

Note: Dynamic Positioning Services reserve the right to amend this specification without prior notice.