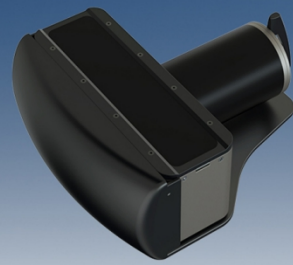


# Hydro MS400P

(ELF) Multi-Beam Echo Sounder



Make one person's engineering easier



## High Performance

Beam angle:  $1^{\circ} \times 2^{\circ}$ , 512 beams, resolution 0.75cm, measurement results meet IHO special standards.



## Low Power Consumption

Power consumption is less than 40W, an ordinary electric car lithium battery lasts about 8 hours.



## Small Size

Size  $208 \times 234 \times 98\text{mm}$  (horizontal \* vertical \* height), A4 printing paper size, the whole system can be transported in a backpack.



## Light Weight

The weight of the whole system is 7kg (transducer 4.5kg, deck unit 2.5kg), easy to pick up, easy to carry, and quick to install.



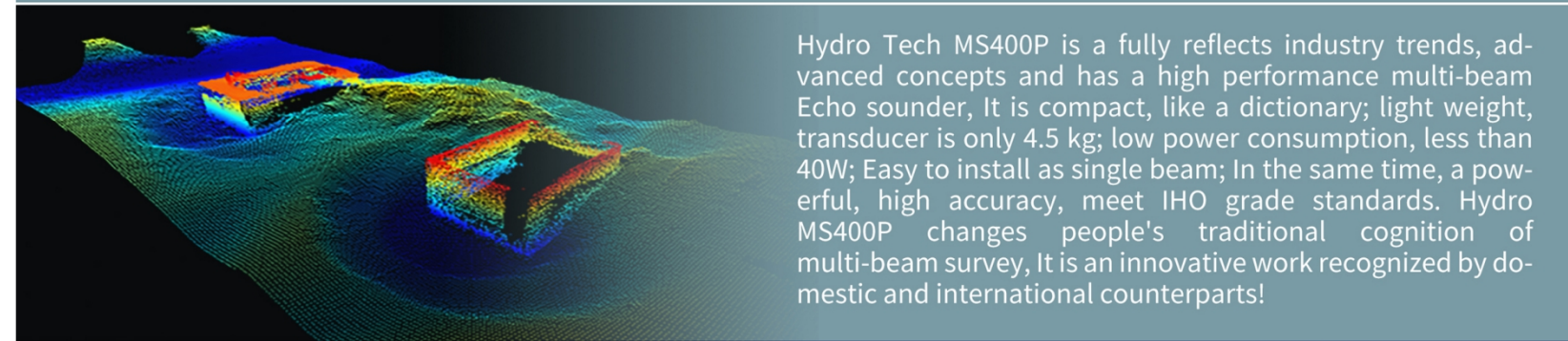
北京海卓同创科技有限公司  
BEIJING HYDRO-TECH MARINE TECHNOLOGY CO.,LTD



Learn More

# Hydro MS400P

(ELF) Multi-Beam Echo Sounder



Hydro Tech MS400P is a fully reflects industry trends, advanced concepts and has a high performance multi-beam Echo sounder, It is compact, like a dictionary; light weight, transducer is only 4.5 kg; low power consumption, less than 40W; Easy to install as single beam; In the same time, a powerful, high accuracy, meet IHO grade standards. Hydro MS400P changes people's traditional cognition of multi-beam survey, It is an innovative work recognized by domestic and international counterparts!



## Recommendation

- Suitable for users with small size, light weight, low power consumption and other requirements.
- It is especially suitable for emergency surveys, river and lake surveys in plateau and mountainous areas, and projects that can only use small or USVs as carriers.
- Domestic and cross-border and other large-scale transfer or transport frequently.
- Survey company owned underwater robot, assault boats, rubber boats, rowed boats etc.

## 场景



救险测量



高原湖泊



断面测量



跨境测量

## 载具



水下机器人



冲锋舟



橡皮艇



摇橹船



## Technical Specifications

Operating Frequency	400kHz
Number of Beams	512
Horizontal Beam Width	$2^{\circ}$
Vertical Beam Width	$1^{\circ}$
Swath	$143^{\circ}$
Depth Range	2~150m
Resolution	0.75cm
Operating Mode	Equal Angle/ Distance
Max Ping Rate	60Hz
Signal Form	CW/Chirp
Pulse Width	15us~8ms
Max Working Depth	50m



## Special Feature

Near Field Focus	Yes
Bottom Tracking	Yes
Water Column	Yes
Side Scan Imaging	Optional
Image Sonar	Optional
Real-time Roll Stabilization	Yes



## Optional Positioning and Attitude Equipment Specifications

Optional positioning and attitude equipment model	Built-in IMU	POS-S25
Heading Accuracy(GNSS Effective)	$0.1^{\circ}$ (2m Base Line)	$0.06^{\circ}$ , 4 m Base Line/ $0.08^{\circ}$ , 2 m Base Line
Attitude Accuracy(GNSS Effective)	$0.1^{\circ}$	$0.03^{\circ}$ (Real-Time RTK) / $0.025^{\circ}$ (Processed)
Heave Accuracy	5cm或5% Range	5cm或5% Range 2cm或2% Range (TrueHeave)
Horizontal Positioning Accuracy	2cm+2ppm(RTK)/ 1.5m(Single Point)	$\pm 8\text{mm}+1\text{ppm}$ (RTK, PPK)/0.5~2m (DGPS) 10cm (Satellite difference, PPP)
Auxiliary Positioning Data:	1.Qianxun RTK CORS, 2.Post-processing support	



## Physical Specifications

Transducer Size	234x 80x 99mm (Receiving Array) $\phi 80 \times 128\text{mm}$ (Transmitting Array)
Weight	6.35KG (In Air) 、4KG (In water)
Deck Unit Size	200mm x 135mm x 70mm
Deck Unit Weight	~1.9KG
Operating/Storage Temperature	$-2^{\circ}\text{C} \sim 40^{\circ}\text{C} / -20^{\circ}\text{C} \sim 55^{\circ}\text{C}$
Power Supply	DC10-32V/AC110~240V
Power	Standard mode: 60W Low power mode: 40W
Cable Length	Standard :8m (Optional)



## Software

### Display Control Software

标配海测通一体化测量软件

### Other Software

USV software



## Auxiliary Equipment

SVS:	External(SVS1500)
SVP:	External(SVP1500)
IMU:	Optional built-in or external
Positioning:	Optional built-in or external

北京海卓同创科技有限公司  
BEIJING HYDRO-TECH MARINE TECHNOLOGY CO.,LTD

青岛海卓同创信息技术有限公司  
QINGDAO HYDRO-TECH MARINE INFORMATION TECHNOLOGY CO.,LTD

☎ 010-57136778 ☎ 13911689871 18611176465  
📍 北京市通州区景盛南二街33号院5号楼1层01

☎ 0532-88917969 ☎ 18561552708  
📍 山东省青岛市崂山区株洲路153号1号楼西单元1703



www.hydro-tech.cn