

# T400

## Multi-beam Echo Sounder System



### Product introduction

The revolutionary T400 focuses on intelligent, integrated and high precision of multibeam echosounder system. Its ultra-compact design can be easily operated by one person and suitable for USV, ROV, AUV platforms.

The number of 1024 sounding beams can provide you with high precision measurement result. Because of IMU built-in receiver, this system does not need calibration. With low power consumption, it is also suitable to operate from battery.

T400, small, lightweight and cost-effective could be your best choice.

### Product Features

- ✘ System Weight < 6.5Kg
- ✘ FM & CW Processing
- ✘ Flexible Power Source (DC10-28 V, AC100-240 V)
- ✘ Simple Interface
- ✘ Roll-stabilization
- ✘ Efficient and portable

### Applications

- ✘ Bathymetry
- ✘ Pipeline Surveys
- ✘ River, Estuary, Channel and Pond Surveys
- ✘ Harbor and Coastline Surveys
- ✘ USV, ROV & AUV Integrated
- ✘ Geological Survey
- ✘ Search and Rescure



#### Small Size Sonar

Receiver and projector  
268x228x101(mm)  
Sonar processor  
196x142x73(mm)



#### Portable

Receiver and projector  
5kg  
Sonar processor  
1.55kg



#### Low Power Consumption

power consumption  
less than60W



#### High Accuracy

Maximum 1024 sounding  
7.5mm depth resolution



#### Integrative IMU

IMU calibration free, and  
simple installation



#### Multiple Application

Bottom track, side scan and  
water column



## System composition



## Application scenario



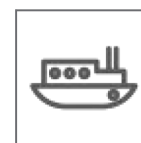
USV measurement



Ultra-shallow water measurement



Water conservancy mapping of rivers and lakes



Offshore underwater surveying and mapping

## Technical Specifications

### Sonar parameters

Model	T400
Frequency	400kHz
Swath Coverage	Up to 140°
Beam Width	2°(TX) *1°(RX)
Number of Soundings	1024 soundings
Depth Range	0.2-150m
Depth Resolution	0.75cm
Beam Patterns	Equidistant and high density
Ping Rate	Up to 60 Hz
Signal Form	CW/FM
Pulse Width	17μs - 2ms
Depth Rating (Sonar Head)	50m
Roll Stabilization	± 10°
Installation Calibration	Free
Side Scan	Support
Real-time Roll Stability	Support
Heading Accuracy(GNSS)	0.1° (2m baseline)
Roll/Pitch Accuracy	0.05°
Horizontal Accuracy	2cm+1ppm(RTK) 0.6m(SBAS)
Heave Accuracy	5cm/5%

### Electric parameters

Power supply	DC18-36V (Type:24V)C AC100-240V
Power	60W
Output Interface	LAN Port*1 3.3V TTL*1 RS232*1
Cable Length	15m(Customized)

Projector Size	220mm×89mm×88mm
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Receiver Size	128mm×80mm×88mm
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Sonar Process Unit	196mm×142mm×73mm
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Sonar Process Unit	1.55Kg
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Projector and Receiver	5Kg
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Operation Temperature	-2°C~40°C
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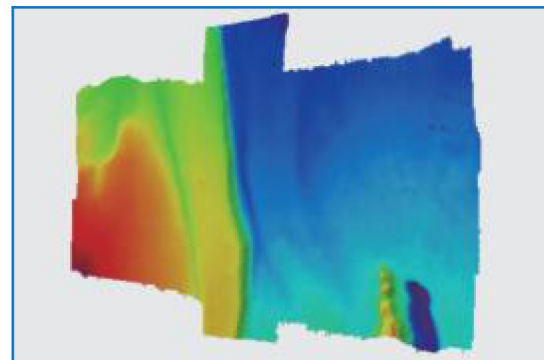
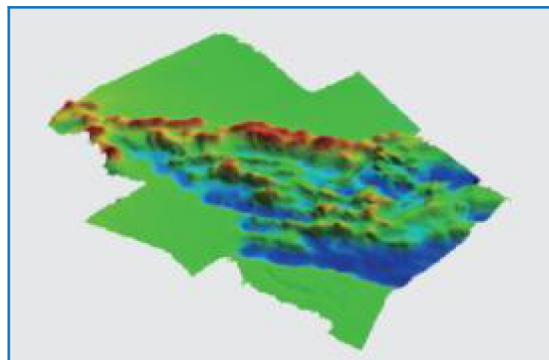
Storage Temperature	-20°C~55°C
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### Software

Onboard data collection and display software

Onboard data process software

## Data sample



Notice:  
With integrated INS