SROD
ROBOTICS

S450A

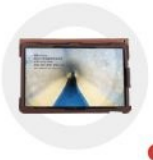
Amphibious Inspection Robot

- √ *Strong environmental adaptability*
- √ *Sealed, waterproof and dustproof*
- √ *Sonar optional*
- √ *DN500~6000*



Product Introduction

The S450A adopts a spiral propulsion structure and is a product that can be used for detection in complex environments such as pipelines, box culverts, swamps, and silt.It has an extremely strong ability to pass through silt and can travel on water when the water level is relatively high. It is a powerful supplement to CCTV inspection and sonar inspection.The S450A mainly consists of an amphibious robot body, a front high-definition pan-tilt camera, a rear fixed high-definition camera, a portable robot control cable reel and a robot control terminal. It can detect pipes with a minimum diameter of DN500mm.



Portable tablet termina



Robot body



Cable drum

Key Specs

Camera	Applicable diameter range	500-6000 mm
	Front and rear view camera	Front and rear 210W
	Zoom the gimbal	10x optics, 16x digital
	Pan-tilt control	Axial 360°, radial 270°
	Light source	Main light: 8×2W Auxiliary light: 16×2W Backlight: 2×2W
	Laser width measurement	Yes
	One-click defogging	Yes
Crawler body	Body size	768×450×280mm
	Weight	15kg
	Working temperature	-20°C-55°C
	Motor power	max300W
	Battery life	4h
	Protection grade	IP68
	Pulling force	14kgf

Controller	Controller type	Portable tablet terminal
	Size	177.3×261×6.2 mm
	Resolution	2800 × 1840
	GPS	Optional
	Hard disk/Memory	256G / 8GB
	WIFI	Yes
	Operating system	Harmony OS
	Operation mode	Touch screen
	Working temperature	0-35°C
Cable drum	Size	564×310×538 mm
	Weight	45kg(Including cables)
	Working temperature	-20°C-55°C
	The way to record meters	Absolute value encoder
	Cable length	200m, customizable
	Winding type	Electric or manual winding

Key Features

Strong environmental adaptability

It can walk or float forward in complex environments such as water, land and silt, and is widely used in municipal drainage pipes, box culverts, culverts, rivers and other scenarios

Real-time addition of defect information

Information can be added and labeled in real time on the captured defect pictures during the detection process

Camera and sonar detection integrated machine

Optional connection sonar can be used as an amphibious detection all-in-one machine to achieve detection by waterborne cameras and underwater sonar

High-definition PTZ camera

A 2.1-megapixel zero-latency digital high-definition camera with one-click defogging and other functions

360-degree all-round detection

The camera is equipped with 360° axial rotation, 270° radial rotation, one-click reset, one-click 360° panoramic scanning, and one-click 90° pitch functions, which can quickly lock onto defects

Sealed, waterproof and dustproof

The robot body reaches an IP68 protection level and has extremely strong water and dust resistance capabilities

Application Scenarios



Municipal Drainage Pipes



Box Culvert and Culvert Inspection



River Channels and Swamps Inspection