SROD
ROBOTICS

S300YL

Long-Distance Inspection Robot

- 1000m long-distance cable reel
- Six-wheel drive, strong power
- Ultra-high lifting stroke
- DN300~3000



Product Introduction

The long-distance pipeline inspection robot S300YL is composed of a crawler, a long-distance cable reel, a portable tablet control terminal and a software system.It is mainly used for pipeline network detection of large urban pipelines and box culverts, with the longest detection distance reaching up to 1,000 meters.It has outstanding obstacle-crossing capabilities and can achieve low-latency transmission of detection data over long distances.



Portable tablet termina

Robot body





Cable drum

Key Specs

Camera	Applicable diameter range	300-3000 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: 10×3.5W
	Laser width measurement	Yes
	One-click defogging	Yes
Crawler body	Body size	960×250×215 mm
	Weight	49kg(Including battery)
	Lifting height	600mm
	Lifting and lowering the load	⩽15kg
	Working temperature	-20°C-55°C
	Motor power	6×210W
	Protection grade	IP68
	Climbing ability	⩽35°

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	920×560×845 mm
	Weight	125kg(Including cables)
	Working temperature	-20°C-55°C
	The way to record meters	Absolute value encoder
	Cable length	1000m, customizable
	Winding type	Electric or manual winding

Key Features

Six-wheel drive, strong obstacle-crossing ability

The power chassis is equipped with high-power hub motors, and the drive motor power can reach 6×210W, providing strong towing force and adapting to various complex terrains

Ultra-high lifting stroke

The lifting frame adopts a double X-shaped design, with a lifting height of up to 600mm, which can adapt to the inspection of pipes of different sizes

Ultra-long-distance detectio

Equipped with a built-in 15Ah long-range battery, it can easily handle ultra-long-distance detection ranging from 500 to 1000 meters

Modular design

The lifting frame, wheel set and front battery, etc. are detachable or replaceable, facilitating daily maintenance and adaptation to different pipe diameters

High-definition PTZ camera

2.1-megapixel zero-delay digital high-definition camera, 360° panoramic lens, one-click defogging

Portable tablet control terminal

High-definition IPS full-view display screen, portable and simple interface operation

Application Scenarios



Municipal Drainage Pipes



Heating Pipes Inspection



Industrial Pipes