

TVS-8000 CCTV PIPE INSPECTION SYSTEM



The system consists of the following main components

- Alligator Amphibious Crawler (Standard Size)
- ▲ Laptop With Control Software
- Motorised Cable Reel
- Remote Controller

The system consists of the auxiliary components

- ▲ Lizard Amphibious Crawler (Small Size)
- Main Controller
- Sonar Probe
- Portable Cart
- Removable Lithium Battery

DESCRIPTION

TVS-8000 amphibious pipeline CCTV camera inspection system is composed of operation software (installed in a Windows 10 computer not supplied), cable reel and amphibious crawler. The software can remotely control the amphibious crawler to walk and float in large-scale pipes and culverts, and transmit the captured images inside the pipes to the computer for real-time display and video recording and storage.

The user can superimpose status information of the crawler on the video in real time. including: inclination, air pressure, distance, date, time and other related information.

The system can be connected to sonar to perform above water inspection by camera and underwater inspection by sonar.

TVS-8000 able to operate underwater and push pass silt, which is a powerful supplement to CCTV camera and sonar profiling.

DESCRIPTION

- ▲ Inspect pipe diameter ranging from 600mm to 6000mm
- ▲ IP68 Waterproofing, suitable for inspection 10m (33ft) under water
- ▲ Two brushless motors, able to pass obstacles
- ▲ 2 million resolution high definition color camera with noise ratio more than 50dB
- ▲ Multiple choices of operation mode: laptop, software control
- ▲ The front and rear camera can adjust the lightness unlimitedly according to the pipe diameter
- ▲ High resolution color rear sight camera with 2 million resolutions
- ▲ Display crawler status by animation, pitch angle output function with measurement scope±45 degree, precision 0.1 degree and optional pitch angle processing software, which can export the pipe sloping curve
- ▲ There is an air pressure indication lamp inside the crawler body. The inside pressure is displayed on the monitor. Embedded inflation valve avoid collision.
- ▲ The cable counter shows the distance of the crawler travelling in the pipe
- ▲ The laptop can be connected with the equipment via cable (recommended) or WIFI, to realize the functions of control, display, editing and video storage
- ▲ The monitor can display the real time pressure, pitch angle, distance and time etc
- ▲ The embedded software can edit and save the data and create the report automatically
- Be able to inspect the pipe diameter



TVS-8000 CCTV PIPE INSPECTION SYSTEM

	I	IP68, can be used up to 10m water depth, air tight protection, built-in
Alligator Amphibious Crawler	Protection	pressure sensor, pressure indication
	Applicable Pipe Diameter	600mm ~ 6000mm
	Applicable Pipeline	Urban pipe and canal, square ditch box culvert, domestic sewage and industrial wastewater, urban rainwater pipeline
	Drive	Double 150W DC brushless motor, screw propulsion structure
	Directional Cruise Function	Ensure the direction of travel
	Adapt To The Environment	In the mud or water
	Circuit Protection	Motor locked rotor, over-current, over-voltage automatic protection
	Lighting Source	Forward 8 groups of high brightness spotlight LED lamps; backward 2 groups of high brightness LED lamps; the brightness of all light sources can be adjusted continuously
	Rear View Camera	Integrated with rear view camera and light, it is used to observe the situation of reversing and cable recovery during the recovery of crawler. The rear view camera is 2 megapixel
	Camera	Spherical pan tilt structure
	Camera Rotation	Electric rotation, pan 360 degree rotation, tilt 180 degree rotation, one key recenter
	Focusing Zoom	Auto focusing, manual adjustment, 10x Optical Zoom
	Imaging System	Color 1/3 ", 2 megapixel (2592 * 1520) CMOS
	Len	Waterproof and anti-fogging
	Weight	18.5kg
	Dimension	890mm*500mm*350mm (L x W x H)
Control system	Control System Configuration	Windows 10 based computer and professional remote hand held controller, built-in software
	Control Mode	WIFI or internet cable
	Control Function	Through the touch screen and joystick operation for movement, camera rotation, video record, cable reel retraction and pay off, light source adjustment, etc



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Cable reel	Cable Length	Standard cable length 120 meters, 200m or 300m are optional
	Cable Parameters	Diameter 5mm floating, imported polyurethane sheath, waterproof, anti-wear, acid and alkali resistance, corrosion resistance
	Power	It can be powered by external battery, generator, utility, etc
	Weight	45kg (300m)
	Dimension	600mm*330mm*560mm (L x W x H

Accessory

Optional Sonar

Sonar probe	Rotatable Ultrasonic Transducer	Projects sound waves to the pipe wall and receives echoes. The transducer completes 360 degrees continuous scanning in 1 second, and each 360 degrees will have 400 transmit / receive cycles
	Beam Angle	0.9 degrees, each transmit / receive cycle will sample 250 points
	Acoustic Frequency	2 mhz
	Receiving Bandwidth	500khz
	Beam Width	0.9deg (-3db, conical beam)
	Sampling Rate	60mhz
	Weight	2.2kg
	Dimension	400mm x 70mm (L X D)