

rotate mainline camera

General information about zoom pan and rotate mainline crawler camera robotic pipe inspection system AD-R2042M

- ✓ AD-R2042M Pipe Crawler is a portable all-in-one device for inspecting pipelines with diameters from 300 to 2000 mm (12"-80").
- ✓ It features dependable, sturdy, highly adjustable design offering users ultimate inspection experience and true portability.
- ✓ It is one of the most sophisticated and efficient, yet easy-to-use and affordable devices in the market.
- ✓ The pipe inspection robot includes several modules that are easy to transport and assemble: pan-tilt-zoom camera, insertion cable, controller, cable reel and crawler. Optional accessories are available on request.
- ✓ The pan-tilt-zoom camera with continuous rotation is equipped with a 0.01 lux sensitive, high-definition CCD anti-fogging camera and laser scale, provides high-quality well-rounded image of pipeline interior.



Other feature:

1-The camera is with pan 360degree rotaion, tilt 180 degree rotation, 120 times zoom, auto focuse, embeded LED light, pressure sensor and laser scale for crack width measurement.

2-The crawler is with 150W DC motor and adjustable speed, and can climb about 50 degree acoording to different pipe status.

3-The crawler also with the inclination that can measure scope ± 45 degree, pressure indication for pressure prompt and rear camera inspecting crawler backwards.

4-The controller is with 8inch color LCD screen and Win7 system, the screen can see the defects inside the pipes clearly under sunlight.

5-It is built-in 128G SSD hard disk and record image in JPG, video in AVI format. The controller controls the crawlers speed, direction, light intensity, camera focus, rotation, camera movement, clutch control, auxiliary light controls.

6-The controller is with keyboard for text writing.

7-The system also be able to communicate with mobile, you can control the wholt system by mobile.

8-The pipe video software inside the system can help you review the info you want, suzh as data, video, inclination, pressure and camera status.

9-The automatic cable drum is with 200m standard cable, and 300m optional.

10-Manual cable drum optional.



Technical Specifications of the device:

PTZ camera:

- This camera is equipped with a lamp ring which is powered independently of the camera.
- Anti-fogging camera lens
- The pan, tilt, zoom camera can be tilted in both directions. Vertical: $\pm 90^\circ$, horizontal: $\pm 360^\circ$
- High resolution CCD camera, light sensitivity 0.01LUX(star), 0LUX (sensed infrared)
- 120 times zooming: 10:1 optical zoom, 12:1 digital zoom
- Auto focusing, manual adjustable is available
- Resolution: NTSC: 530 (TV Lines)
- 360 degree rotation, one key center function laser measurement gauge

Crawler:

- Waterproof to IP68
- Working temperature: $-10^\circ\text{C}\sim 50^\circ\text{C}$
- The four wheels of the crawler are driven by two motors (power 150W)
- The crawler is designed for larger nominal pipe diameters (from 300mm up to approx. 2000mm) and is equipped with auxiliary lights, 2000lm.
- Min. illumination: 0.001lux
- Power : $12\text{V}\pm 10\%\text{DC}$, 100mA
- Pressurized, with sensor
- Material: brass, nickel plated, stainless steel, aluminum.
- Elevator: electric elevator
- Inclination: measurement scope ± 45 degree, precision 0.1 degree
- Speed: adjustable speed, max. 32m/min
- Direction: forward, backward, left, right
- Pressure indication: green light(1.2-1.5 bar, normal pressure), red light abnormal light.
- Climbing: max. climb degree about 50° according to different pipe status
- Rear view camera: 1/3" Sony Ex-View B/W CCD, integrate camera and light, inspect crawler backwards and retrieve the cable
- Weight: 25kg.
- Dimension: 483mm*203mm*165mm



Controller:

- Controls the crawlers speed, direction, light intensity,
- camera focus, rotation, camera movement, clutch control, auxiliary light controls.
- Displays: Date, time, inclination, data, with text editing facility.
- 8inch color LCD screen and Win7 system
- built-in 128G SSD hard disk and record image in JPG, video in AVI format keyboard for text writing
- AC 110V, 60Hz, NTSC/PAL modes
- Remote control app. Available.
- The pipe video software inside the system can help you review the info you want, such as data, video, inclination, pressure and camera status.
- Weight: 18kg,
- Dimension: 510mm*485mm*295mm

Auto cable reel:

- Automatic cable drum, three modes to allow for the drum to wind up when the Crawler is not moving and vice versa, mode 3: cable retrieving only
- Standard cable length: 200m, 300m is available.
- 6mm, multi-core cable, with Polyurethane sleeve and Kevlar reinforced.
- Adjustable handle for ease of transportation
- Weight: Approx. 50kg

6"wheel set (4pcs) :

- ID : 45mm, OD : 135mm
- For 375-600mm pipe

8"wheel set (4pcs) :

- Rubber wheels, stronger obstacle crossing ability
- ID: 95mm, OD: 160mm
- For 500-1800mm diameter pipes

Toos and Accessories(set):

- Including wheels, manhole hook, special rope, guide pulley, etc.

