## **EOD ROBOT PCR-02**





PCR-02 EOD Robot is a versatile platform. It can carry various devices for different applications. It is a six wheeled tracked chassis with independent drive of each track to move in various environments. With a speed of more than 5 km/h it reaches its targeted area fast. Its manipulator with extendable arm ensures a large reach to one and half meters. It can move the suspicious objects, and when fully retracted can lift up to 40 kg. Monitoring system is made up of camera, monitor, antenna, etc. A set of LED lights is mounted each in front of body and at the back of the body.

- High strength Aircraft grade Aluminium Alloy body.
- Optional accessories tools are available for specialized roles.
- Infrared Cameras enable night operations.
- Can move normally with 140 Kg load.
- A lift of 40 Kg with retracted arm.

	Platform Specifications	
Dimensions	L*W*H: 910 * 650 * 550 mm	
Weight	90kg (without accessories, package and control box)	
Battery	DC24V lead acid rechargeable battery	
Working time	≥ 5 hours	
Maximum Speed	≥1.5m/s	
Grade Ability	It can climb up the slope of 45° and stop steadily on the slope.	
Climbing Stairs Ability	With traction-free assist, it can climb up and down the stairs of 160mm step height and 45° angle slope.	
Drag Capability	≥500N	
Turning Ability	In horizontal cement ground or bituminous pavement, the robot can turn clockwise or anticlockwise 360°.	
Loading Capacity	When loading 140 Kg, it can move normally	
Limited Passage Width	≤700mm	
Control Distance	Wireless control: ≥150m (visible range) Wire control:100m (optional 200m);	
Over-obstacle Capacity	It can cross the obstacle of 320mm height.	
Floodlight	Two group LED floodlight (one group on the front and back)	
Number of Cameras	4	
Forward Camera	Color infrared induction	
Backward Camera	Color infrared induction	
Cradle Head Various focal Camera	Color infrared induction	





Manipulator Gripper		
Manipulator Gripper Camera	Color infrared induction	
Lift Capability	Can move with clamping weight of 40K without dropping	
Max. Mechanical Arms	1650 mm	
Gripper of Manipulator Maximum Expansion Range	250 mm	
Arm Extension when stretch out and draw back	500 mm	
6 Mechanical Arm DOFs	Manipulator gripper opening and closing Manipulator gripper rotation Small arm rotation Telescopic arm extend and retract Big arm rotation Big arm rise and fall	
Rotation Angle	Manipulator gripper can rotate clockwise and anticlockwise 360°; Small arm can rotate clockwise 150° and anticlockwise 110°; Big arm can pitch angle of 90°; Kidney basin can rotate clockwise 180° and anticlockwise 45°	





Monitoring cradle head		
DOFs of Cradle Head	2 independent DOFs, adjustable rotation speed.  Cradle rotation: 360° continuous	
	Maximum rotation speed of 130°/sec.  Cradle pitching: -45°~ 120°, maximum pitching speed of 50° per second.	
Control Terminal		
Вох	Portable, waterproof, dustproof, high strength	
Size	≤ L 460 * W 370 *H 260 mm	
Weight	≤ 10kg	
Display Screen	12-inch HB LCD, wide viewing angle, outdoor clear picture	
Operation	High-quality rocker handle, human software interface design, easy observation and convenient operation	
Display Image	It can monitor 4 video signals simultaneously or separately amplify one of 4 video signals	
Information Display	Real-time voltage	
Battery	Rechargeable 24V lithium battery, working time ≥ 3 hours fully charged.	
Control Box	Via the buttons and handle of control box, the operators can control video switch, zoom, moving, cradle rotating, floodlight, telescopic arm, gripper opening and closing, small arm rotating, big arm lifting, kidney basin rotating, wrist rotating, etc.	

