



## MR-5

### Mobile Robot for Hazardous Tasks

**MR-5 is an advanced heavy-duty mobile robot for Explosive & Ordnance Disposal and other Hazardous Tasks**

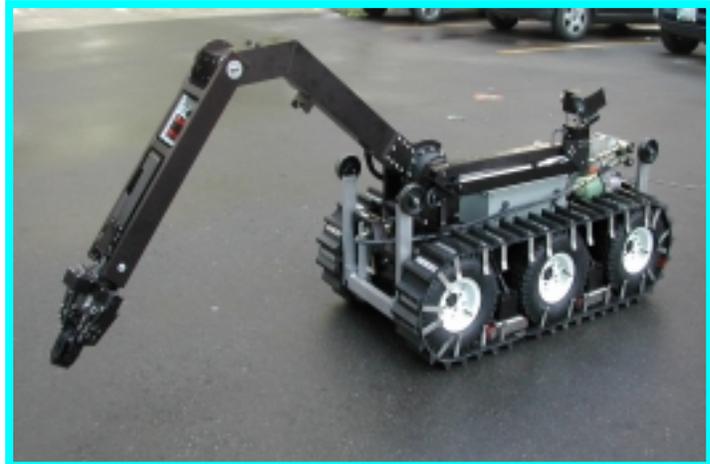
MR-5 is a remotely operated mobile robot ideally suited for EOD, SWAT, HazMat, surveillance and other hazardous tasks. Rugged and reliable the robot can be used in any weather condition, in almost any terrain. This highly manoeuvrable vehicle can operate on wheels or tracks. It can negotiate obstacles and climb stairs. The arm, which incorporates advanced robot technology, combines extremely accurate backlash-free motion with high payload capacity. With up to seven joints the arm offers unparalleled dexterity.



### FEATURES

- Rugged and reliable
- Ideal for EOD, IEDD, SWAT, and other hazardous tasks
- Low cost, low maintenance
- Operates on wheels or tracks
- Climbs stairs
- Dexterous arm with up to seven joints
- Precise arm and wrist control
- Long reach, high payload

**PATENT PENDING**



# MOBILE ROBOT SYSTEMS DIVISION

## SPECIFICATIONS

### DIMENSIONS

- W: 26 in (66 cm) x L: 51 in (129 cm) x H: 31 in (78 cm)

### WEIGHT

- 550 lbs. (250 kg) – standard configuration

### CLIMBING ABILITY

- Slopes 45<sup>0</sup>
- Stairs 45<sup>0</sup> (with tracks)
- Obstacles height 12" (30 cm); width 12" (30 cm)

### MANEUVERABILITY

- 360<sup>0</sup> turn in a 55" (140 cm) wide hallway
- Proportional control of drive motors
- Negotiates curbs, ditches and other obstacles

### SPEED

- Variable 0 – 1.3 Mph (2.1 Km/h)
- Higher maximum speeds available with transmission

### DURATION OF MISSION

- Battery power 3 – 5 hr

### REACH

- Horizontal 69" (175 cm) from edge of platform
- Vertical 98" (249 cm) from ground

### LIFT CAPACITY

- 55 lbs. (25 kg) with arm fully extended
- 265 lbs. (120 kg) above front edge of platform

### COMMUNICATION

- 2-way audio and data; 1-way video
- Cable or wireless

### ENVIRONMENTAL

- Operates on all surfaces and in all weather

### FEEDBACK

- Camera images (picture-in-picture); diagnostic messages; battery status

## STANDARD CONFIGURATION

- Vehicle: Six wheels; Tracks; Two drives; Removable 48V battery pack
- Arm: Shoulder: 215°  
Elbow: 260°
- Wrist: Roll: unlimited
- Gripper: 12" (30 cm) fully open  
80 lbs. (36 kg) grip force
- Cameras: Gripper - color, wide angle  
Drive – color, wide angle  
Surveillance – pan/tilt/zoom/focus/iris  
Camera extension arm – 24" (60 cm)
- Control Station:  
Weatherproof enclosures  
Simultaneous camera images  
Portable Control Panel
- Communication: cable reel with manual rewind
- Battery charger & tool kit
- Operating and maintenance manuals

## OPTIONS

- Articulated wheels for stability on climb and descent
- Track rollers for track tensioning
- Turret: -120° to +180°
- Wrist Base (Roll): +/- 100°
- Wrist Pitch: +/- 100°
- Linear extension pitch: 6" (15 cm)
- Wireless: LOS 1600 ft. (500 m)  
Urban 650 ft. (200 m)
- On-board automatic cable winding: 650+ ft. (200+ m)  
fiber-optic or coaxial
- Relocatable camera: colour, wide angle
- Infrared camera
- Disrupter mount
- Laser assembly for disrupter & shotgun
- Disrupter aiming system
- Drop-charge reel
- Shotgun mount
- X-Ray mount assembly
- Window breaker

## ACCESSORIES

- Disrupter
- Shotgun
- Cartridges
- X-Ray Unit
- Other accessories - inquire at ESI



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