



## HD2-S Robot with Manipulator

---

### HD2-PTZA-528.356.4 Advanced Configuration

The SuperDroid Robots HD2-PTZA-528 Surveillance Robot is a large, rugged robot that can be quickly deployed in an emergency. Weighing about 150 lbs, this treaded robot is equipped with a manipulator arm making it ideal for hostage situations, door opening, remote surveillance/inspections and EOD disposal.

*Images shown may not be an exact representation of the robot's features listed in this document*



## Specifications:

- **Robot:**
  - Enclosed weatherproof chassis
  - Rubber tracks for all terrain navigation
  - Lithium Iron Phosphate (LFP) battery system, 24V 19.2 Ah
  - Speed: 0 to 110 ft. per minute, infinitely adjustable
  - Up to 8 hours of runtime
  - Weight: 147lbs
  - Dimensions with rear stabilizer (L x W x H): 45 x 22 x 26 inches (arm stowed)
  - Dimensions without rear stabilizer (L x W x H): 40 x 22 x 26 inches (arm stowed)
  - Ground clearance: 2.5 inches
  - Rear Stabilizer Arm – Removable actuated rear stabilizer arm. Acts as a stabilizer when ascending stairs and other steep inclines to help prevent roll over.
  - Easily removable batteries



- **6-Axis arm**
  - Robust design for improved versatility
  - Position feedback: Position values sent to OCU, providing advanced kinematic motion display
  - Vertical reach: 70.5 inches. Horizontal reach: 54.5"
  - Arm payload: 20 lbs. fully extended
  - Base rotation: 420 degrees
  - Shoulder rotation: 190 degrees
  - Elbow rotation: 270 degrees
  - Wrist: continuous rotation and +/- 90 degrees tilt (180 total)
  - Parallel Finger Gripper: 4.5" opening with 65lb squeeze force
- **Camera system**
  - Primary 30X zoom 360 Pan and Tilt camera mounted on the base of the arm with high intensity LED light and tactical laser pointer
  - Gripper IR camera
  - Fixed front IR camera
  - Fixed rear view/backup IR camera.
- **Operator Control Unit (OCU)**
  - Rugged Pelican case style enclosure
  - Lithium-ion battery, 11.1V 10Ah
  - 2.4GHz high power digital radios
  - Integrated joysticks to intuitively control drive, cameras, and manipulator
  - Two modes (cartesian and joint) for easy manipulator control
  - 2-way audio
  - Advanced kinematic modeling and collision detection – see a 3D model of the robot with the current position of the arm and flipper arms and warnings when arm is nearing a collision with the robot
  - Microsoft Surface Pro Tablet with 12" touch screen
  - Video recording and image snapshots
- **Battery Charging** - The smart chargers are fully automatic and will charge all the batteries simultaneously with a single 115VAC plug (230 VAC also available upon request)
- **NIST Qualified Design** – Outperformed competition at National Institute of Standards and Technology event
- **EOD Ready** – Mounting for Carbon Fire 10 Disruptor included
- **Ethernet Jacks** – Ethernet jacks are included in OCU and Robot for connection of 4G routers or ethernet tether.
- **Unlimited Technical Support**
- **Training Video and PDF Operation Manual**



### Available Options and Upgrades:

- **Repeaters and monitoring stations** – Repeaters and monitoring stations are available to significantly increase the robot's operating range and/or assist second entry teams.
- **Camera** – We offer many camera configurations and options. We can supply full HD systems or thermal imaging systems
- **Removable Release Hitch** – A removable remotely operated release hitch can be added to tow stop strips or cables and release them
- **HAZMAT sensors** – MultiRAE gas sensors including radiation detection integrated into OCU
- **Additional Battery Packs** – 24V 19.2 Ah robot battery system and 11.1V control battery
- **Arm tools/accessories:**
  - Window piercer/tire puncture tool
  - Hook/object puller
  - Wire Cutter
- **Carbon Fire 10 Disruptor** – A complete Carbon Fire 10 Disruptor Kit with the CFI Initiator for direct and easy mounting to multi-axis arm (for EOD capable/qualified departments).
- **Paint Color** – The robot is painted with a durable epoxy with textured finish. Standard Colors: Desert Tan and Black. Custom colors available upon request.
- **Additional Customization** – Since we develop, design, and manufacture our robot, we can provide any additional customization desired upon request.

### Applications:

- **Hostage and hazardous surveillance** – Survey hostile/hazardous situations while staying out of harm's way.
- **Opening Doors** – With the multi-axis arm, things like doors will no longer stop you from surveying potentially dangerous locations.
- **Clearing rooms remotely** – Clear rooms and buildings remotely with audio and video surveillance.
- **EOD Disposal** – Our UGV is an excellent choice to keep people out of harm's way when it comes to bomb diffusing and removal. The HD2 Arm can be equipped with a mount for a Carbon Fire 10 Disruptor. Disruptor can also be supplied to qualified EOD Departments.



## Pricing

1. Available upon request.
2. 1 year warranty included.

## Standard Payment Terms:

1. Payment by check, money order or wire transfer is accepted.
2. Listed price based on 60% Due ARO, remainder prior to shipment.

## Delivery

1. Procurement of materials, assembly and testing is required
2. Lead time is typically 8-14 weeks
3. Shipping cost FOB Fuquay Varina, NC

## General Terms

1. SuperDroid Robots, Inc is not responsible for special incidental or consequential damages resulting from any warranty or under any legal theory, including, but not limited to lost profits, downtime, goodwill, damage to, or replacement equipment or property, or any cost of recovering, reprogramming, or reproducing any data stored. ANY LIABILITY SHALL BE LIMITED TO REPLACEMENT OF DEFECTIVE PARTS. SuperDroid Robots, Inc. is further not responsible for any personal damages, including, but not limited to bodily and health damages resulting from any use of our products.
2. SuperDroid Robots, Inc. makes no representations as to the fitness of its products for specific uses. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXCLUDED.
3. Agreements shall be construed in accordance with the laws of the State of North Carolina, and the rights and obligations created hereby shall be governed by the laws of North Carolina.
4. In the event a dispute or controversy arises, such dispute or controversy (including claims of default) shall be brought in the courts of Wake County, North Carolina and the plaintiff hereby agrees to this choice of venue.

## Warranty

1. SuperDroid Robots will repair any manufacturing defects for 1 years after shipment. Damage from abuse or neglect will not be covered. Any shipping costs are the responsibility of the purchaser.
2. Unlimited technical support.
3. Consumable items will not be covered by the warranty. Consumable items include, but are not limited to treads, chains, bearings, wheels, and batteries.
4. Extended warranties, spare parts, and maintenance training is available, contact us with specific needs. Service agreements are also available.