



# LT2 Arm Surveillance Platform

# SDR\_LT2-FTZA-100.356.3 Basic Configuration

The SuperDroid Robots LT2-FTZA-100 Surveillance Robot with a removable 4-Axis arm is a medium sized, rugged robot that can be quickly deployed in an emergency. Weighing 85 lbs, this treaded robot can be an instrumental tool in keeping the operator safe while inspecting hazardous situations.

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



#### LT2-FTZA-100 – Tactical Robot with Manipulator Arm



# **Specifications:**

#### Robot:

- Enclosed weatherproof chassis
- o Rubber tracks for all terrain navigation
- o Lithium Iron Phosphate (LFP) battery system, 24V 9.6 Ah
- o Speed: 0 to 140 ft. per minute, infinitely adjustable
- Rear Flipper/Stabilizer Arms allows the robot to navigate obstacles and act as a stabilizer when ascending stairs
- Up to 8 hours of runtime
- o Weight: 85lbs
- o Dimensions (L x W x H): 30 x 19 x 18 inches (arm stowed)
- o Ground clearance: 2 inches
- o Easily removable batteries

#### 4-Axis arm

- Removable arm for improved versatility
- Position feedback: Position values sent to OCU

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o Vertical reach: 56 inches. Horizontal reach: 48"

o Arm payload: 15 lbs. fully extended

Shoulder rotation: 190 degrees

Elbow rotation: 270 degrees

Wrist: continuous rotation

o Parallel Finger Gripper: 5" opening with 65lb squeeze force

#### Camera system

o Primary 30X zoom tilt camera embedded in the nose of the robot with high intensity LED light

#### Operator Control Unit (OCU)

- o Rugged Pelican case style enclosure with Microsoft Surface Pro 12" touch screen tablet
- o 2.4GHz high power digital radios
- o Lithium-ion battery, 11.1V 10Ah
- o Integrated joysticks to intuitively control drive, cameras, flipper arms, and manipulator
- o Preset positions for flipper/stabilizer arms for stowing and climbing stairs
- o 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
- 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
- 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 system. Also available, a removable rear mounted perspective PTZ camera with 30x optical zoom with CREE LED Spotlight and Tactical Laser Pointer. Also available are 30X nose zoom camera, Gripper IR camera, and or rear view/backup IR camera.
- Audio Add 1-way or 2-way audio for conversation monitoring or hostage negotiation.
- Image Processing Video image processor with multiple views including quad view and split screen.
- Arm Upgrades Upgrade the arm by adding wrist tilt +/- 90 degrees tilt (180 total) Add a 315 degree rotating base.

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Revised: January 16, 2019

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- **Two Operation Modes** Allows the arm to be controlled by either joint control or cartesian control for easy manipulator control.
- Removable Release Hitch A removable remotely operated release hitch can be added to tow stop strips, etc. and release them.
- **HAZMAT sensors** If you need to see if the atmosphere is safe, we can install MultiRAE gas sensors including radiation detection.
- Additional Battery Packs 24V 9.6 Ah robot battery system and 11.1V control battery
- Arm tools/accessories:
  - Window piercing/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 or Black. Custom colors available upon request.
- Store and protect Protect your investment with a reusable foam lined transport case
- Additional Customization Since we develop, design, and manufacture our robot, we can provide
  any additional customization desired upon request.

#### **Applications:**

- **EOD Disposal** The multi-axis arm allows for easy manipulation in the environment and can deliver or dispose of ordnances at a safe range for the operator. The LT2 Arm can be equipped with a mount for a Carbon Fire 10 Disruptor. Disruptor can also be supplied to qualified EOD Departments.
- **Climbing Obstacles** With the attached flipper arms, this robot can climb almost any obstacle up to 24". The robot can also self-right if it gets turned over.
- Hostage and hazardous surveillance Survey hostile/hazardous situations by staying out of harm's way.
- Clearing rooms remotely Clear rooms and buildings remotely with video surveillance.

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# Supplication

### LT2-FTZA-100 – Tactical Robot with Manipulator Arm

#### **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 Fuguay 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.

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