

Spot[®]

○○○

Four Legged Force Multiplier



MULTI-MISSION QUGV

Spot helps reduce risk in potentially dangerous scenarios, enabling operators to safely assess and de-escalate tense or hazardous situations.

Agile

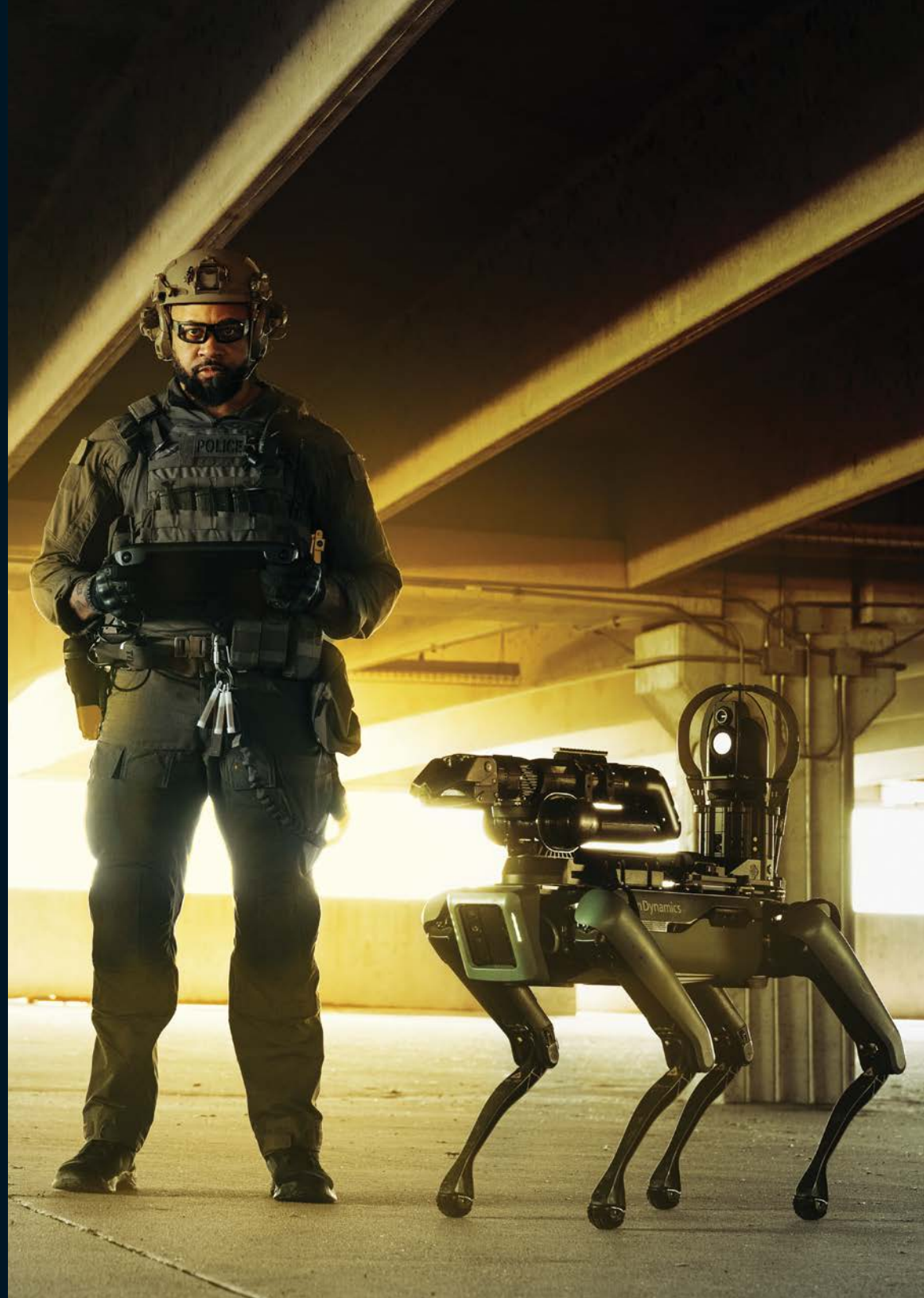
Spot's athletic intelligence makes it easier to operate than tracked and wheeled robots. Within moments, operators can quickly drive Spot up and down stairs, over unstructured terrain, and more.

Dexterous

With the Spot Arm, operators can pick up objects and open doors with ease. Issuing high level commands via tablet actions, users can be up and running with very little training.

Customizable

In addition to the payloads included in this bundle, our network of partners have created an ecosystem of enhanced capabilities for Spot, including a variety of mission-applicable chemical, gas, and radiological sensors.





Teleoperated or Autonomous

Spot can be operated manually using a tablet controller or desktop software. It can also be programmed to perform routine rounds autonomously.



Avoids Obstacles

Spot's dynamic intelligence enables it to detect and navigate around objects in its path.



Recovers from Slips and Falls

Spot can navigate challenging terrain with ease, but if it falls, it can self-right without operator intervention.



Climbs Stairs

Spot can easily climb OSHA-certified stairs. Simply point the robot and go—no complicated controls needed.



Manipulates Objects

Equipped with the Spot Arm and preset controls, Spot can open doors, grasp handles and valves, and manipulate objects—including lifting, carrying, and dragging.



Autonomously Opens Doors

Spot's pre-sets enable it to semi-autonomously open doors without complicated controls. Operators tell Spot the type of handle, the side of the hinge (left or right), and the swing direction (push or pull) and the robot does the rest.

MULTI-MISSION CAPABILITIES



ISR

INTELLIGENCE, SURVEILLANCE & RECONNAISSANCE

Spot provides important situational awareness to first responders by enabling quick remote investigation.



EOD

EXPLOSIVE ORDNANCE DISPOSAL

Spot reduces risk by allowing operators to make first contact with potential explosives and render safe from a distance.

“ We use the robot dog for almost all of our scenes now. Technology allows us to interact with individuals without putting us at risk or them at risk. ”

CMDR. CRAIG BELLAMY, HOUSTON PD



CBRNe & Hazmat

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR & EXPLOSIVES

Equipped with a variety of sensing payloads, Spot makes teams aware of hazards from a safe distance.



Nuclear Applications

Spot navigates active and decommissioned plants to check radiation levels, inspect equipment, manipulate objects, and respond to emergencies.



Mapping & Exploration

Spot captures high-quality 3D data in hard-to-reach, enclosed spaces to increase situational awareness.



Autonomous Inspection

Spot supports inspection of critical infrastructure, confined spaces, and hazardous environments with pre-programmed autonomous missions or remote operation.



Perimeter Security

Spot automates security rounds, performing scans and detecting potential risks in dynamic environments.

INVESTIGATE, IDENTIFY, RENDER SAFE, DISPOSE

Spot for Bomb Disposal

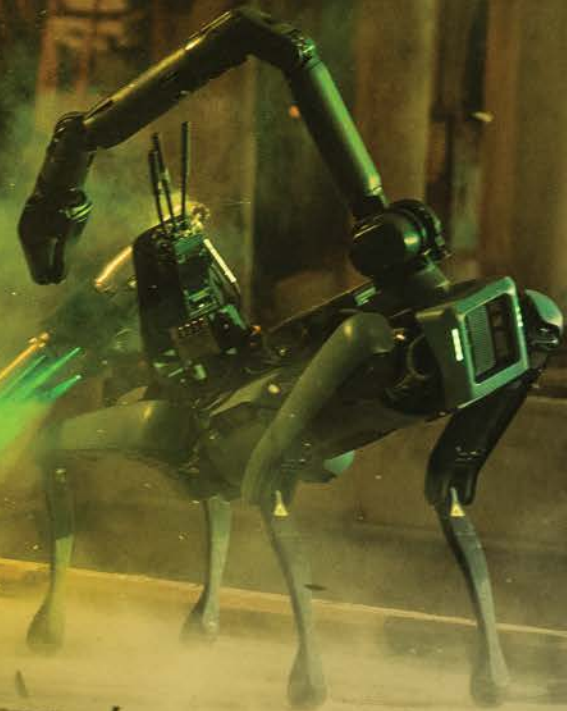
Keep people out of harm's way while assessing and rendering safe potentially explosive threats from a distance. Mission-ready in minutes, Spot can traverse uneven terrain quickly and provide full eyes on the scene using on-board cameras and sensors. The Spot Arm—with intuitive manipulation presets—allows operators to carefully pick up objects, open doors, and get a closer look at suspicious objects with the LED-lit gripper camera. Once they have the information they need, the team can use various disrupter payloads to render the object safe.

- Multiple cameras to view suspicious packages
- Arm to move objects to a safer location
- Front and rear mounted disrupter integrated kits available

DISRUPTER INTEGRATIONS AVAILABLE:*

- CarbonFire CF10
- Chemring RE70 (Recoilless)
- Chemring RE12G (Recoilless)
- M5 Hornet (Recoilless)
- Pigstick
- HotRod

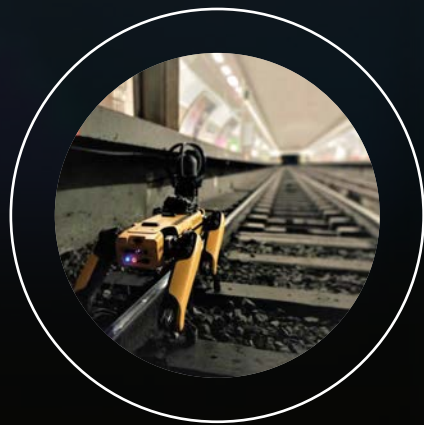
* Reach out to Boston Dynamics Sales for the latest information about bomb disposal solutions and additional integrations.



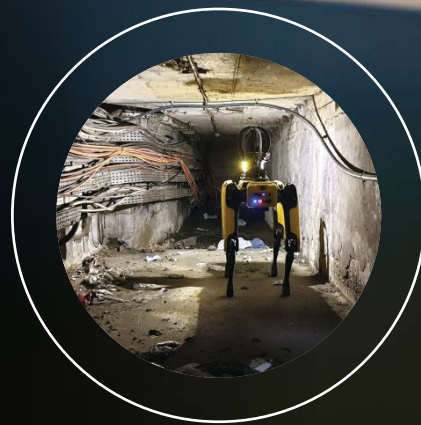
PREDICT ISSUES, PREVENT FAILURES, REDUCE RISK

Spot for Autonomous Inspection

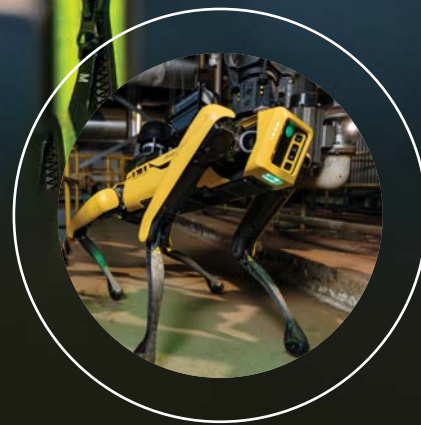
Outfitted with sensors for visual, thermal, and acoustic inspection, Spot collects data from challenging environments. Spot can autonomously navigate pre-programmed missions, or you can operate the robot remotely using the tablet or Orbit browser-based software.



**INFRASTRUCTURE
AND TRANSPORTATION**



**CONFINED
SPACES**

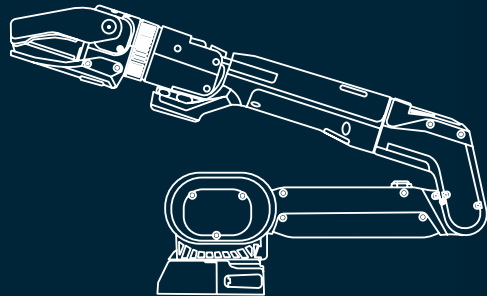


**INDUSTRIAL
FACILITIES**

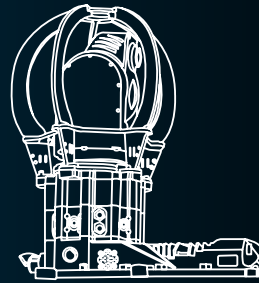


**RESEARCH
AND DEVELOPMENT**

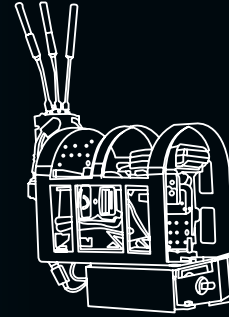
SPOT® THE MODULAR QUADRUPED PLATFORM



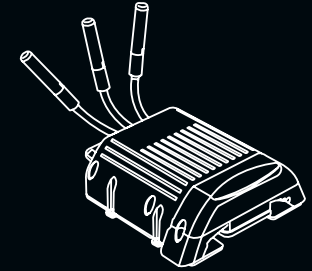
SPOT ARM



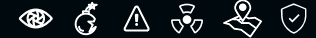
SPOT CAM



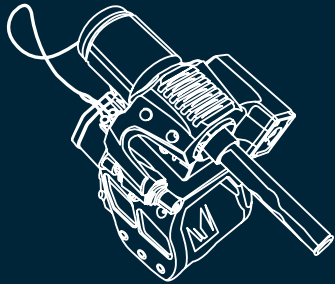
CBRNe & HAZMAT SENSORS



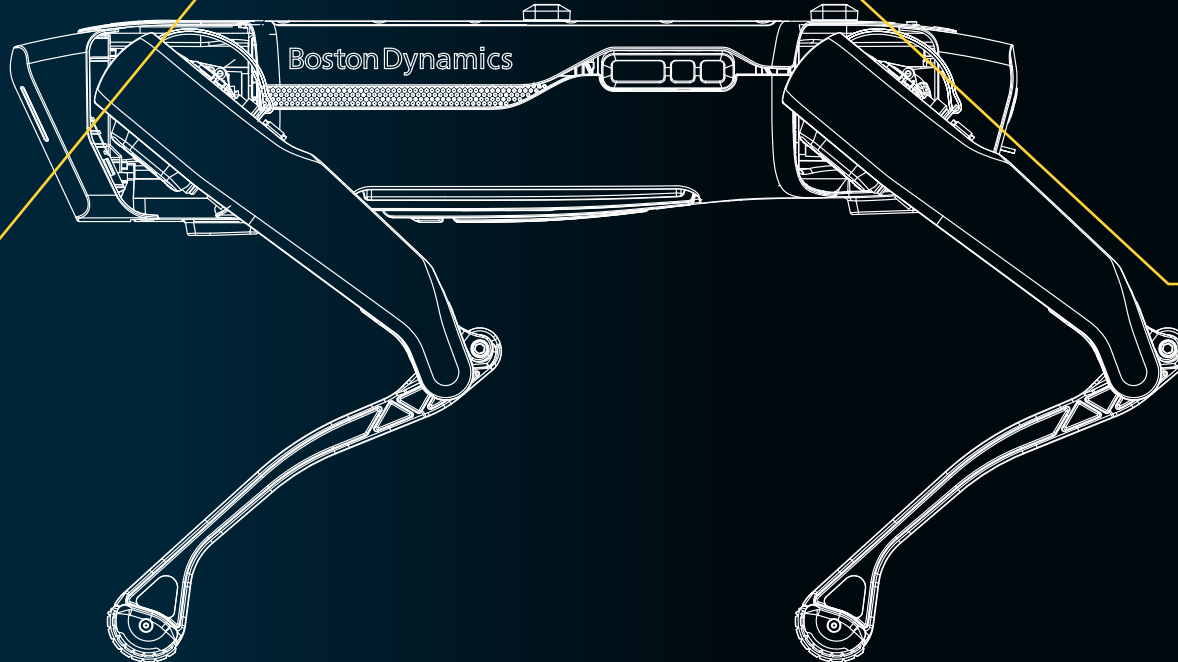
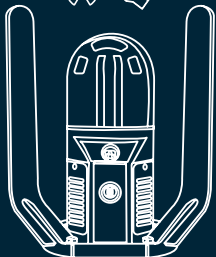
PERSISTENT SYSTEMS RADIO KIT



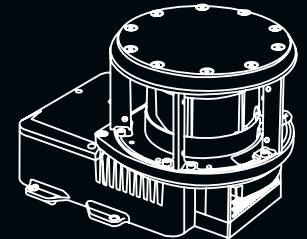
DISRUPTERS



LASER SCANNERS



CORE I/O







DEFENSE & PUBLIC SAFETY KIT

SPOT ARM

Equipped to operate through both semi-autonomous actions and telemanipulation, the arm will open doors, pick, place, push, or drag objects, and adapt to new situations at the push of a button or swipe of a screen.




Features:

-  6 degrees of freedom plus a gripper
-  Semi-automated manipulation options
-  Carries up to 11kg (24 lbs)
-  In-line 4K gripper camera, LED light, and time-of-flight (ToF) depth sensor

SPOT CAM

The Spot Cam payload turns Spot into a powerful inspection tool with purpose-built cameras. 30x optical zoom allows you to see details at a distance, and an integrated thermal camera helps to detect hot spots and more in low light situations.


Features:

-  Integrated radiometric thermal camera
-  Spherical camera (360 x 170" view)
-  Pan-tilt-zoom (PTZ) camera with 30x optical zoom

PERSISTENT SYSTEMS RADIO KIT

The Persistent Systems MPU5 Radio Kit enables point to point communications between Spot and its operator, so you can deploy Spot quickly and easily through a secure network with no infrastructure required.

Features:

-  Creates a powerful, secure network anywhere
-  Able to mesh if a wider network is needed
-  Radios support 4.9 GHz

SPOT CARE

One year of premium service and support to keep your robot up and running at peak performance.

Features:

-  Free damage protection*
-  Part replacement
-  Quick repair turnaround

* See our [Spot Care Terms and Conditions](#)



THE SPOT ROBOT SPECIFICATIONS

Defense & Public Safety Kit

DIMENSIONS WITH PAYLOADS

Length
1100 mm (43.3 in)

Width
500 mm (19.7 in)

Height (Sitting)
618 mm (24.3 in)

Default Height
(Walking)
1037 mm (40.8 in)

Max Height (Walking)
1127 mm (44.4 in)

Min Height (Walking)
947 mm (37.3 in)

Net Mass/Weight
(including battery)
50.5 kg (111.3 lbs)

LOCOMOTION

Max Speed
1.6 m/s

Max Slope
±30°

Max Step Height
300 mm (11.8 in)

TERRAIN SENSING

Horizontal Field of View
360°

Range
4 m (13 ft)

Lighting
> 2 Lux

Collision avoidance
maintains set distance
from stationary obstacles

CONNECTIVITY

WiFi
2.4GHz / 5GHz b/g/n Ethernet

ENVIRONMENT
Ingress Protection IP54

Operating Temp.
-20°C to 55°C

BATTERY

Battery Capacity
564 Wh

Average Runtime
90 mins

Standby Time
180 mins

BATTERY (continued)

Recharge Time
60 mins

Length
324 mm (12.8 in)

Width
168 mm (6.6 in)

Height
93 mm (3.7 in)

Mass/Weight
5.2 kg (11.5 lbs)

CHARGER

Input Voltage
100-240VAC, 50/60Hz 8A Max

Output
35-58.2 VDC, 12A Max

Length
380 mm (15.0 in)

Width
315 mm (12.4 in)

Height
178 mm (7.0 in)

Mass/Weight
7.5 kg (16.5 lbs)

Operating Temp.
0°C to 45°C



TABLET WITH JOYSTICKS

Height

138 mm (5.4 in)

Width

286 mm (11.3 in)

Depth

56 mm (2.2 in)

Weight

546 g (1.2 lbs)

Touch Screen Size

8" diagonal

Interface Controls

2x Joysticks, 2x 5-direction buttons, and 2x bumper buttons

Resolution

1920x1200

Battery Life

Up to 5 hours

Ingress Protection

Rain and dust resistant

SAFETY AND COMPLIANCE, UNITED STATES



Designed according to ISO 12100 for risk assessment and reduction methodology and IEC 60204-1 for electrical safety. See [Information for Use](#) for further details on intended uses.

EMC: FCC Part 15B Radio

equipment: Incorporates a FCC Part 68 Certified radio system

Laser product

Class 1 eye-safe per IEC 60825-1:2007 & 2014

SPOT ARM

Degrees of Freedom

6 + gripper

Length (at full extension)

984 mm (38.7 in)

Max. Endpoint Speed

10 m/s

Max. Lift Capacity**

Up to 11 kg (24.3 lbs)

Continuous Lift Capacity**

(at 0.5 m extension)
5 kg (11 lbs)

Max. Drag Capacity**

(on carpet)
Up to 25 kg (55.1 lbs)

Max. Reach Height

1800 mm (70.9 in)

GRIPPER

Depth

90 mm (3.5 in)

Max Aperture

175 mm (6.9 in)

Peak Clamp Force

(at tip of opening)
130 N

Integrated Sensors

Accessory Port, ToF, IMU, 4K RGB, Gigabit Ethernet, 50W power, camera sync (PPS), LED light

**Payload capacities measured at 22°C

SPOT CAM

360° CAMERA

Field of View (FoV)

360 x 170°

Video Frame Rate

Variable*

Video Storage

No

Video Streaming

Yes

Resolution

10 MP

File Size

31.1 MB

Still Image Format

PPM (Portable Pixel Map)

PTZ CAMERA

Resolution

2MP, 1080p video

Optical Zoom

30x

Pointing Accuracy

2 degrees

Range of Motion

170°/sec

Tilt Range

-30 to 270°

IR CAMERA

Scene Temp. Range

(High Gain)
-40°C to +160°C

(Low Gain)

-40°C to +550°C

Video Speed

7.5 Hz

FoV

69 x 56°

Image Resolution

640 x 512

Accuracy

Radiometric $\pm 5^\circ\text{C}$

PERSISTENT SYSTEMS RADIO KIT

OPERATOR RADIO

Length

(with antennas and battery)
390 mm (15.4 in)

Length (without antennas

and battery)
140 mm (5.5 in)

Width

70 mm (2.8 in)

Depth

40 mm (1.6 in)

Total Mass/Weight

(with antennas and battery)
1.1 kg (2.4 lbs)

Mounting

Belt clip

RADIO TRANSMISSION DETAILS

Model

Persistent Systems
MPU5 RF-2150

Frequency Range

2412 - 2462 MHz

RF Modulation

OFDM (64QAM, 16QAM, QPSK, BPSK)

Antenna Chains

3 Independent RF Chains

TX/RX Operating Modes

All MIMO modes from SISO to 3x3

Channel Bandwidth

5, 10, and 20 MHz

Peak TCP Throughput

150 Mbps at 20 MHz Channel

Configured

Transmit Power
.955W

ENVIRONMENT

IP Rating

IP68

Storage Temperature

-40°C to 70°C

Operating Temperature

-20°C to 45°C



CASE STUDY: MASSACHUSETTS STATE POLICE

In 2024, Spot assisted officers during a standoff on Cape Cod. As a SWAT team dealt with a man barricaded in a home, they deployed Spot to clear two floors of the building, then discovered the man holding a weapon in the basement. Spot provided critical information the officers needed to de-escalate the situation and keep everyone safe.

“The incident provided a stark example of the benefits of mobile platforms capable of opening doors and ascending stairs in tactical missions involving armed suspects. In addition to providing critically important room clearance and situational awareness capabilities, the insertion of Roscoe into the suspect residence prevented the need, at that stage of response, from inserting human operators, and may have prevented a police officer from being involved in an exchange of gunfire.” **Massachusetts State Police**

GET STARTED WITH SPOT TODAY.

Contact our sales team to learn more about how you can implement the robot on your team:
www.bostondynamics.com/spot-sales

Visit: www.bostondynamics.com

© 2025 Boston Dynamics, Inc. All rights reserved.
For trademark, copyright, patent, and other intellectual property and legal information, visit <https://www.bostondynamics.com/terms>

Spot-Gov-Brochure-09/10/25



BostonDynamics

