Spot®

FOR PUBLIC SAFETY

Keep people out of harm's way and safely assess hazardous situations.

Spot helps reduce risk in potentially dangerous scenarios, enabling first responders to safely assess and de-escalate tense or hazardous situations.
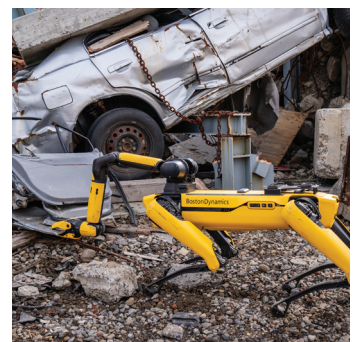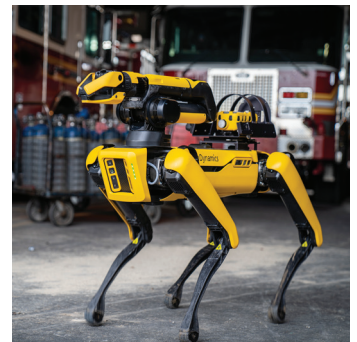
Investigate Suspicious Packages

Investigate suspicious packages and suspected explosives with Spot while maintaining a safe perimeter. Integrate sensors to measure oxygen levels of potentially explosive environments or detect explosive materials. Equipped with cameras, x-ray devices, and the Spot Arm, Spot enables Explosive Ordnance Disposal (EOD) technicians to safely inspect suspicious packages.

De-escalate Hostage Scenarios

Spot can gather valuable information to support response teams and facilitate remote negotiations, reducing risk to first responders and the public. In active shooter or hostage situations, Spot can help first responders establish visual and two-way communications, so they can gather the information needed to de-escalate the situation and keep officers and bystanders out of harm's way.

Detect Hazardous Materials

Deploy Spot with specialized sensors to detect radiological and nuclear material, toxic gases, and other hazardous materials. Spot helps field operators identify and assess Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) threats from a safe stand-off distance, traversing unpredictable terrain and collecting data about the risk.

Génération ROBOTS

Boston Dynamics

Specifications

Base Robot

DIMENSIONS
Length = 1100 mm (43.3 in)
Width = 500 mm (19.7 in)
Height (Sitting) = 191 mm (7.5 in)
Default Height (Walking) = 610 mm (24.0 in)
Max Height (Walking) = 700 mm (27.6 in)
Min Height (Walking) = 520 mm (20.5 in)
Net Mass/Weight (Spot with battery) = 31.7 kg (69.9 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 45°C

Battery

Battery Capacity = 564 Wh
Average Runtime = 90 mins
Standby Time = 180 mins
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

Height = 127 mm (5.0 in)
Width = 214 mm (8.4 in)
Depth = 10 mm (0.4 in)
Weight = 426 g (0.9 lbs)
Touch Screen Size = 8" diagonal

Resolution = 1920x1200
Ingress Protection = IP65

Joystick Add-on available for Spot Arm

Travel Cases

ROBOT CASE
Includes robot and tablet
Length = 927 mm (36.5 in)
Width = 546 mm (21.5 in)
Height = 464 mm (18.25 in)
Net Mass/Weight = 47.6 kg (105 lbs)

POWER CASE
Includes two batteries and charger
Length = 810 mm (32 in)
Width = 530 mm (21 in)
Height = 300 mm (12 in)
Net Mass/Weight (two batteries) = 28kg (61 lbs)

Payload Mounting

Max Weight = 14 kg (30.9 lbs)
Mounting Area = 850 mm (L) x 240 mm (W) x 270 mm (H)
Mounting Interface = M5 T-slot rails
Connector = DB25 (2 ports)

Power Supply = Unregulated DC 35-58.8V, 150W per port
Integration = Available software API and hardware interface control document

Spot Dock

DIMENSIONS
Length = 1140 mm (44.9 in)
Width = 414 mm (16.3 in)
Height = 403 mm (15.9 in)
Mass/Weight = 22.9 kg (50.5 lbs)

POWER
Input = 100-240 VAC 50/60 Hz 8A
Output = 58V at 12A
Charge Time = 2-3.5 hours*

*Charge time varies based on table below

Ambient Temp.	80% charge	100% charge
25°C	50 min	2 hrs
35°C	2.5 hrs	3.5 hrs

ENVIRONMENT
Operating Temp. = 0°C to 35°C
Lighting = Ambient light required
Mounting = Bolt/tie down locations provided

CONNECTIVITY
Gigabit Ethernet passthrough to robot

CERTIFICATIONS
UL1564, NEMA 2
IEC 61558

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