



MFE Spot Connected Gas Detection Solution

Collect atmospheric data remotely, monitor real-time conditions, and gain critical insights before workers enter a hazardous environment. Spot and the Blackline Safety multi-gas detector integrated by MFE increases site visibility and lowers risk to personnel.



Gas Leak Detection

Enable real-time monitoring of over 20 gases including LEL, H2S, CO, O2, ammonia, SO2, and VOCs.

Confined Space Pre-Entry

Spot's athletic intelligence enables it to go anywhere a person can go, including stairs and uneven terrain. Operators can manually operate Spot via a simple tablet or desktop interface. Equipped with acoustic, thermal, visual, and gas sensing payloads, Spot provides situational awareness before personnel enter an area.

Emergency Response

Spot protects first responders by remotely gathering data about site conditions and enabling teams to make more informed decisions about how to proceed.

Industries



Oil & gas



Semiconductor manufacturing



Chemical processing

Features



Blackline Safety multi-gas detector



Detects 20+ gases



Supports up to four cartridges



Single-gas, multi-gas diffusion & multi-gas pump cartridge types



Hot-swappable modular sensor design



Cellular connectivity (4G/3G/2G)



Real-time cloud data streaming

BostonDynamics



Hazardous Area Monitoring

Gas detection typically requires sending a person into an unknown environment. Spot can enter these spaces first—either patrolling autonomously for routine checks, or manually for situational inspections. Spot is not intrinsically safe by design, but if conditions become hazardous, the system can automatically trigger a mission response such as moving Spot to safety.

Routine Patrols

Schedule autonomous missions for routine, repeatable data collection. Analyze trends and get alerted if Spot detects anomalous conditions.

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 = $\pm 30^\circ$
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

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

Blackline Safety Gas Detector

ENVIRONMENT

Ingress Protection = IP67
Operating Temp. = -20°C to 55°C
Storage Temp. = -30°C to 60°C

CERTIFICATIONS

Class I Division I (Groups A, B, C, D)
ATEX / IECEx / UKCA
CE / RoHS

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



Contact

sales@bostondynamics.com
www.bostondynamics.com/spot-sales

Rev 6/29/26

Boston Dynamics

