



Hive (Cellular)

Secure networks, by Hive

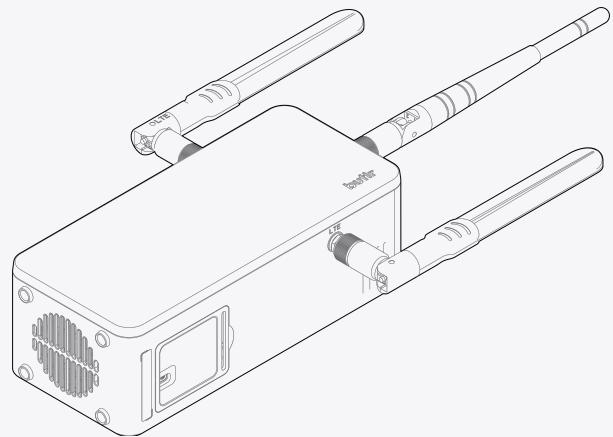
Butlr Hive enables a secure wireless mesh network for seamlessly connecting Heatic sensors. Easy to set up and manage, the Hive gateway boasts a secure design for effortless management of deployed sensors.

Hive (Cellular) Quick Facts

Model Number: GWDSRSCL2

Dimensions: 8.5 x 6.5 x 4 in

Weight: 17.28oz (490g)



Operating System

Linux

Color Option

White

Compatible Sensor Models

Heatic 1, Heatic 2, Heatic 2+

Max number of connected sensors: 12

Configuration Interface

Butlr web-based interface/mobile app

Command Line Interface

(No touch screen on device)

Deployment

Indoor only

Hardware operating temp: 0 - 104 °F

Mounting: Command Strips / Screws / Magnetic /

Drop Rod

Warranty

Warranty as outlined by Butlr's purchase terms and conditions

Internet Connection

Cellular Standards: 4G LTE

Supported Bands: Frequency bands specific to the carrier and region

SIM Support: Single SIM slot (IoT SIM card)

Power Supply

USB-C Power Supply

Input: 100-240V~50/60Hz 0.8A

Output: 5.0V == 4.0A 20.0W

Security and Privacy

Data encrypted in transit (TLS 1.2) and at rest (AES256)

SAML Authentication via Auth0

TIER certified data centers

Annual internal audit security assessments

Annual external penetration tests

No personally identifiable data collected

SOC2 Type II

LTE Bands

LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28

LTE TDD: B38/B39/B40/B41

WCDMA: B1/B2/B4/B5/B6/B8/B19

GSM: B2/B3/B5/B8

Regulatory

USA: FCC, TSCA, California Prop65

Canada: IC

EU: CE RED, RoHs, WEEE, EN 301489-1&17, EN 62368

Australia: RCM

Japan: MIC

Singapore: IDA

South Korea: KCC

India: WPC, TEC

UK: UKCA

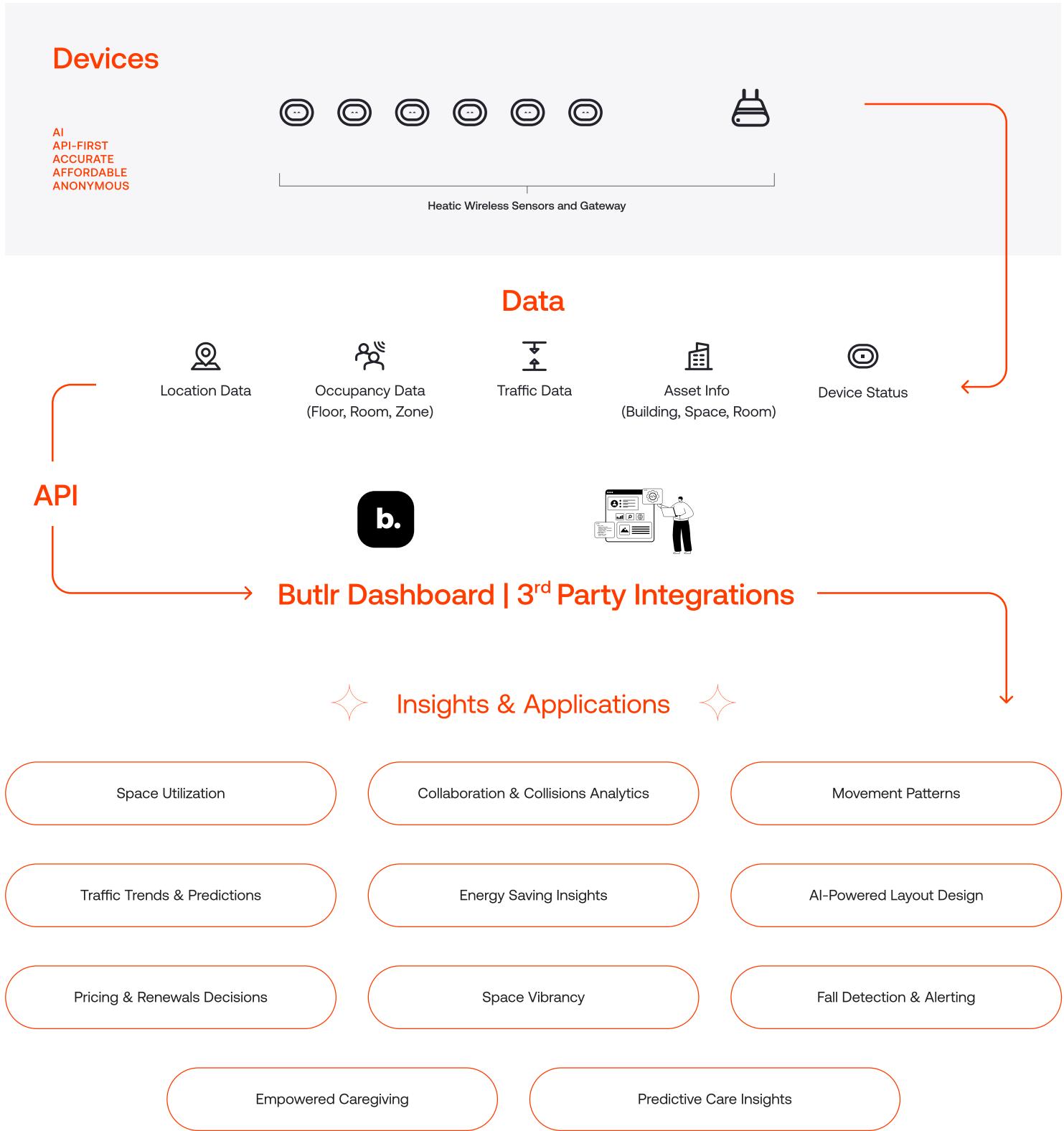
China: SRRC, CCC, CTA

World: CB

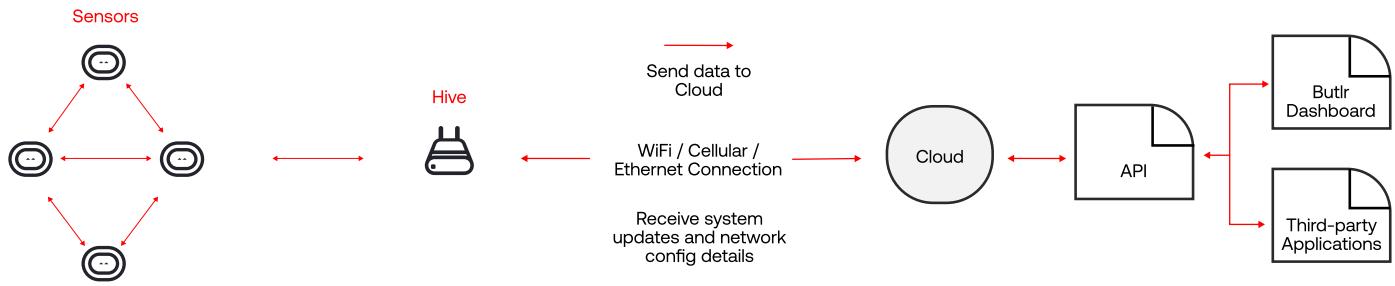
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Platform Overview



System Overview

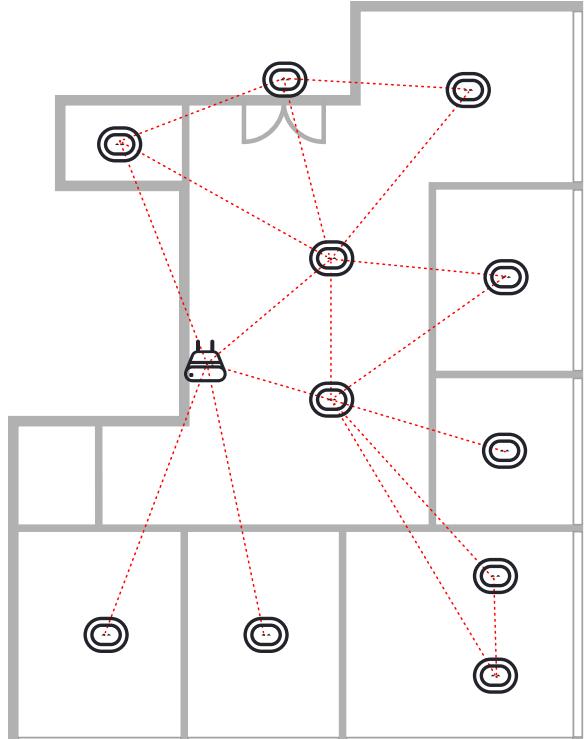


Mesh Network

Heatic Sensors and Hives form a mesh network. The system works best when the distance between devices (from Hive to Sensors or from one Sensor to another) is less than 30 feet (10 meters), this greatly depends on what other devices are working on the 2.4GHz WiFi band in the area.

Device Group

To achieve the best real-time performance, each Hive should not be connected to more than 12 sensors. Specifically, the frame rate limit per device group is 36 frames per second (FPS). Traffic sensors run at 8 FPS, while Presence sensors run at 3 FPS. We recommend grouping devices based on proximity.



Hive

Heatic Sensor

Networking

Network Interfaces

Hive (Cellular)	4G LTE
Sensor	Proprietary Wireless Network Protocol
Network Configuration Options	DHCP configurations
Proxy Servers	Not supported
Firmware Update	Over-the-Air (OTA)

Sensor-Hive Mesh Network

Wireless Network Frequency	2.4GHz to 2.4835GHz
Wireless System Security	NIST Certified
Wireless Network Type	Self-healing Mesh
Wireless Network Protocol	6LoWPAN Internet Protocol (IP) and IEEE 802.15.4e Standards Compliant
Wireless Network Formation	Automatic
Wireless Network Reliability	>99.999%
Measurement type	Synchronized
Sensor Hardware Architecture	Programmable System-on-Chip

Hive Specs

General Specs

Operating System	Linux
Power Source	100-240 V AC Wall Power
Power Supply	5.0 V, 4.0 A USB-C power supply with US / EU / AU /UK /KR / CN / India plug adapter convertor
Network Connection	Cellular
Max. Number of Heatic Sensors per Hive	12
Compatible Sensor Models	Heatic 1, Heatic 2, Heatic 2+
Usage	Indoor only
Operating Temp. Range	0°F to 104°F (0°C to 40°C)
Operating R.H. Range	5% to 90% noncondensing
Warranty	Warranty as outlined by Butlr's purchase terms and conditions
Certifications	USA: FCC, TSCA, California Prop65 Canada: IC EU: CE RED, RoHs, WEEE, EN 301489-1&17, EN 62368 Australia: RCM Japan: MIC Singapore: IDA South Korea: KCC India: WPC, TEC UK: UKCA China: SRRC, CCC, CTA World: CB

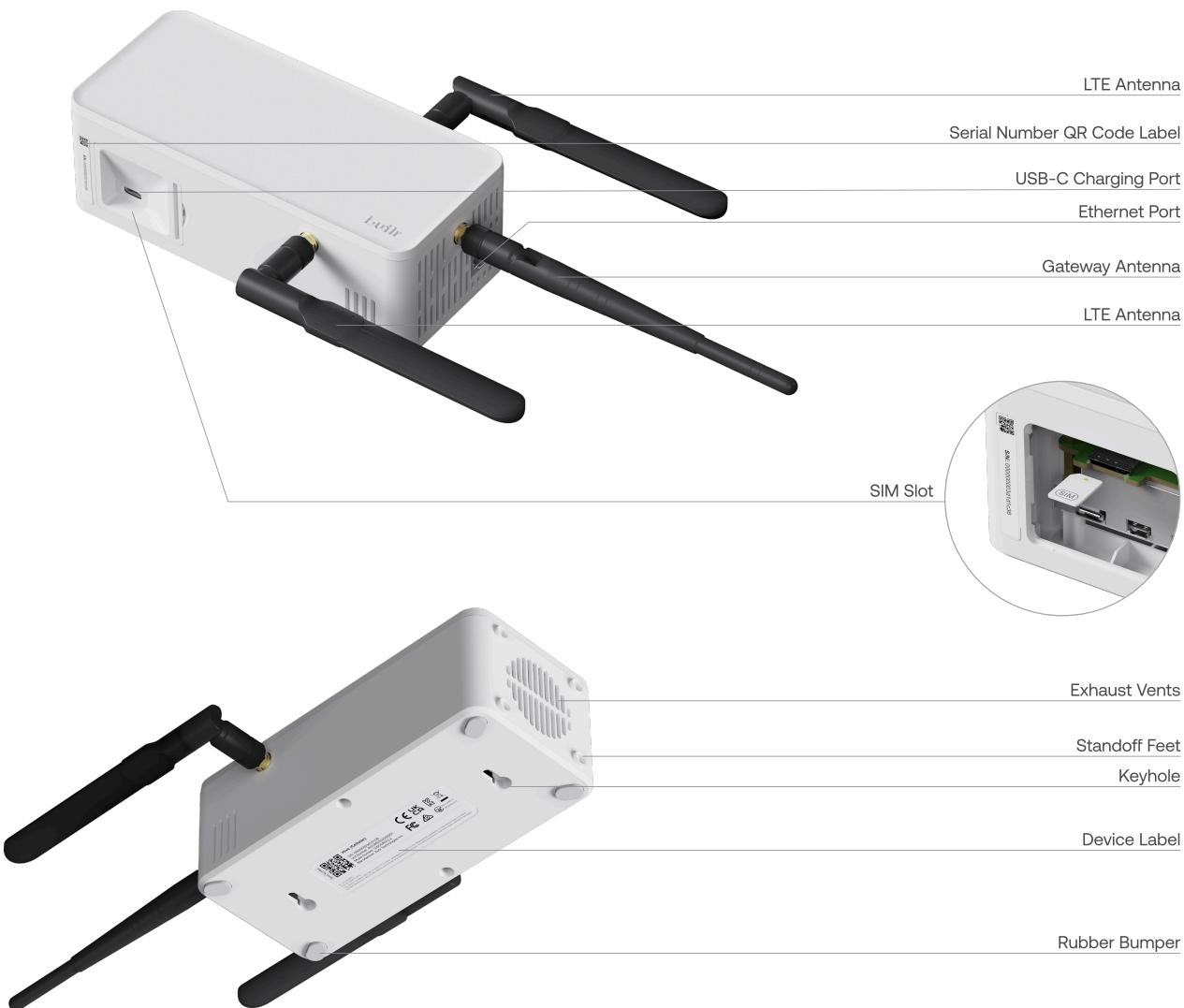
Hive-Internet Connectivity

Cellular	Cellular Standards: 4G LTE Supported Bands: frequency bands vary by carrier and region. Butlr uses a certified SIM provider to ensure optimal connectivity. If a different SIM is preferred, contact the Butlr Support Team to verify provisioning and compatibility. SIM Support: Single SIM slot (IoT SIM card)
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Physical Design

Weight	17.28oz (490g)
Dimensions	8.5 x 6.5 x 4 in (217 x 167 x 61 mm)
Enclosure Material	ABS
Configuration Interface	Butlr web-based interface/mobile app Command Line Interface (No touch screen on device)



Mounting

Mounting Guide

support.butlr.io -> Mounting Guide

Hive-to-Wall/Ceiling

Command Strips / Screws / Magnetic

Deploying Hives

When possible, space co-located Hives a few meters apart to minimize radio interference between Access Points. Multiple Hives can function effectively if local traffic remains within safe levels.

Flexible Mounting System



Command Strips

(Use only for wall mounting or mounting under a desk. Do not mount too high or on the ceiling)

Screws

(Install screws on the wall, then hang the Hive onto the screws using the keyhole slot on the back)



Magnetic Mounts for metal surfaces

Thank you.

Contact us

Have questions about the Butlr People Sensing Platform?

Please contact us at support@butlr.io or

submit a form via our website www.butlr.com or

visit our Learning Center at <https://support.butlr.io>

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Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radiation Exposure Statement:

1. This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment.
2. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
3. The device has been evaluated to meet general RF exposure requirement.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.