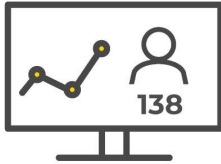Picture may differ from
the actual product

GDPR-compliant people counting solution to extract greater value from your retail operations, smart building or office

Terabee People Counting L-XL LoRa is designed for people counting in large entrances and corridors, and uses the latest Time-of-Flight technology for greater reliability. It is GDPR compliant by design, providing accurate people counting data by monitoring the number of people who enter or exit doorways or corridors. The solution encompasses an IoT hardware device with embedded counting software to enable powerful analytics services.

Key features

— GDPR compliant by design
— 3D depth people counting sensor
— Multi-device support for wide door counting (through Ethernet cables only)
— Easy to install and configure via Web GUI
— Effective in low-light conditions
— Two status LEDs for easy troubleshooting
— Power supply via Micro-USB
— LoRaWAN for data transmission
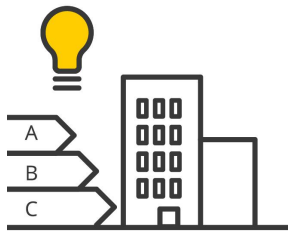— Powerful people counting algorithm with 98% accuracy

Terabee, 90 rue Henri Fabre
01630 Saint-Genis-Pouilly, France
(5 km from Geneva Airport)

+33 7 50 15 16 64
terabee-sales@terabee.com
www.terabee.com

Applications

Smart offices	Facility management	Staff presence optimization
Occupancy monitoring	HVAC systems integration	Maximum capacity compliance
Space and facility optimization	Energy savings	Public spaces and retail

Technical specifications

Performance	
Technology	Infrared Time-of-Flight depth sensor
Field of View	74° x 57°
Coverage area dimensions	1.50 x 1.10 m at 2.40 m high with one device
Multi-devices for wide passageways	Yes, up to 5 devices through Ethernet cables
Installation height range	From 2.4 m up to 4.0 m
Use environment	Indoor
Counting accuracy	98%[1]
Electronics	
Power source	Micro-USB (minimum 5V - 2.5A)
Power consumption	10 W average (minimum recommended 12.5W)
LED indicators	Two LEDs
Initialization time	Approx. 1 min
Mechanics	
Dimensions	Ø 130.0 mm x 36.2 mm
Weight	220 g
Housing material	PU 8150
Color	White, Black (extra colors on demand)
Operating temperature	0° to 35°C
Storage temperature	-20° to 60°C
Installation	On-ceiling mounting with mounting plate, supplied
Networking	
Communication interface	WiFi Access Point for configuration and local firmware upgrade LoRaWAN (1.0.3, Classe A) for data transmission
Supported LoRaWan frequencies	EU 863-870 MHz, US 902-928 MHz
LoRaWAN activation methods	OTAA, ABP
Antenna specification	+0.8 dBi, VSWR ≤ 2
Device hostname for WiFi-AP	terabee-<serial_number>
Data protocols	HTTP/HTTPS for Local API
Setup	Web GUI on the device accessible by laptop
Conformity	
Standard reference	CE, FCC, RoHS (not available for pre-series)

[1] Counting accuracy is assessed on the total number of entry and exit counts in representative conditions. In very diverse environments, this value may change.

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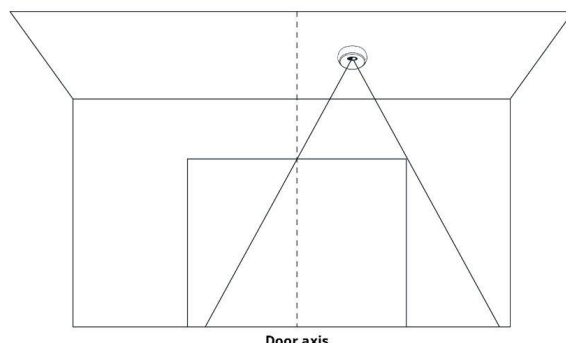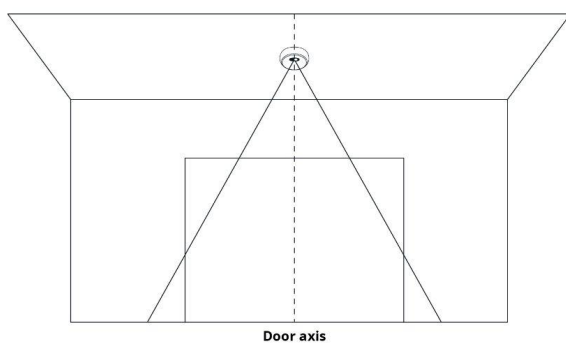+33 7 50 15 16 64
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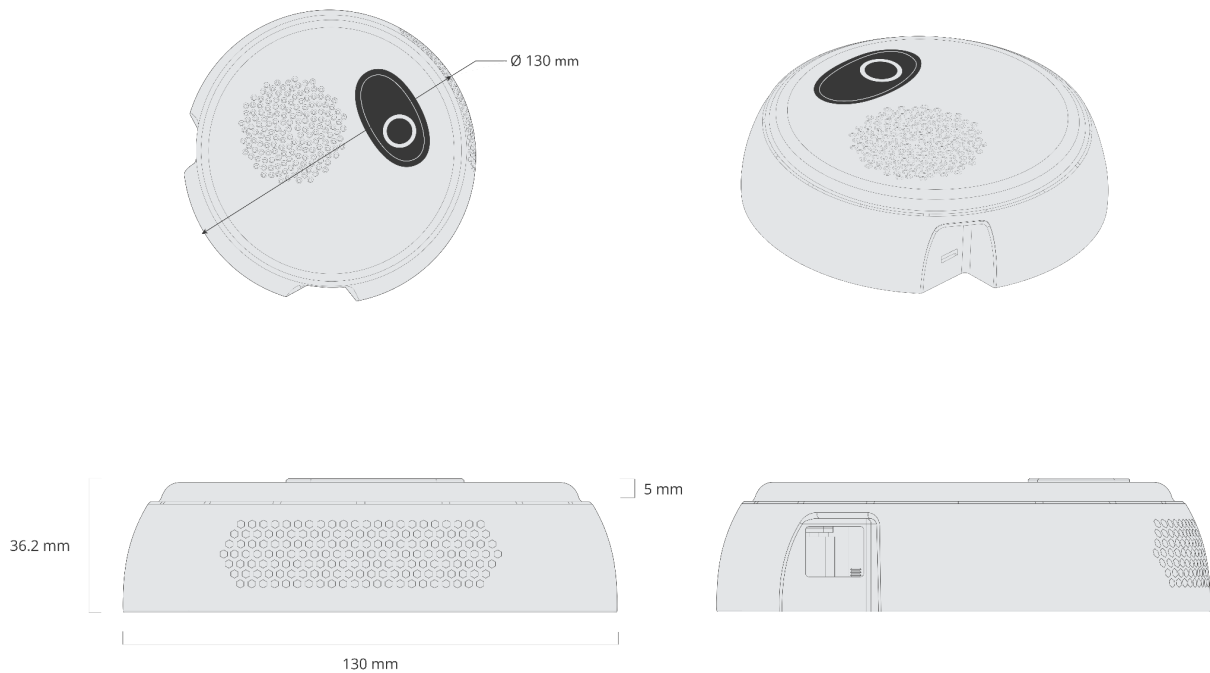
Single-device installation

Terabee People Counting L-XL LoRa installs like a household smoke alarm. It needs to be placed centrally above doors and corridors and 30 cm minimum from the nearest vertical wall.

The monitored floor area depends on the installation height:

Installation height (m)	Monitored area (m x m)
2.40 (min)	1.50 x 1.10
3.20	2.30 x 1.70
4.00 (max)	3.40 x 2.55

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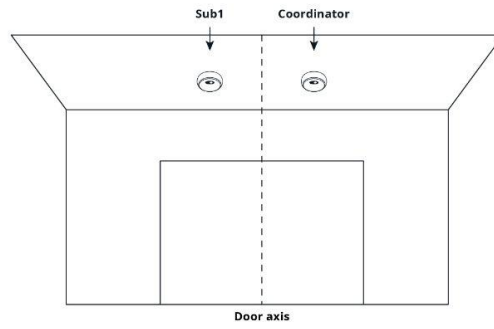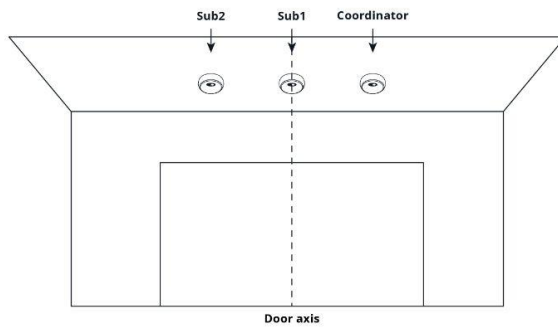www.terabee.com

Multi-device installation

Up to five Terabee People Counting L-XL LoRa devices can be installed together through Ethernet cables to cover wider entrances and passageways. One device acts as the coordinator and the others as subordinates.

Installation height (m)	Max distance between devices (m)	Door coverage			
		2 devices	3 devices	4 devices	5 devices
2.40	0.80	2.30	3.10	3.90	4.70
2.50	0.90	2.45	3.35	4.25	5.15
2.60	1.00	2.60	3.60	4.60	5.60
2.70	1.10	2.80	3.90	5.00	6.10
2.80	1.20	3.00	4.20	5.40	6.60
2.90	1.35	3.25	4.60	5.95	7.30
3.00	1.50	3.60	5.10	6.60	8.10
3.10	1.65	3.85	5.50	7.15	8.80
3.20	1.80	4.10	5.90	7.70	9.50
3.30	1.95	4.35	6.30	8.25	10.20
3.40	2.10	4.60	6.70	8.80	10.90
3.50	2.25	4.85	7.10	9.35	11.60
3.60	2.40	5.15	7.55	9.95	12.35
3.70	2.55	5.45	8.00	10.55	13.10
3.80	2.70	5.75	8.45	11.15	13.85
3.90	2.85	6.05	8.90	11.75	14.60
4.00	3.00	6.40	9.40	12.40	15.40

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2 Devices

Sub1   Coordinator

Door axis

3 Devices

Sub2   Sub1   Coordinator

Door axis

4 Devices

Sub3   Sub2   Sub1   Coordinator
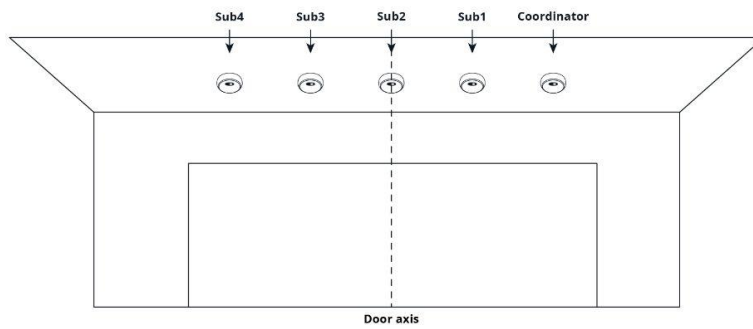
Door axis

**5 Devices**

Sub4   Sub3   Sub2   Sub1   Coordinator

Door axis

Time-of-Flight advantages

By using active Time-of-Flight technology to sense depth, the Terabee People Counting L-XL LoRa collects non-intrusive depth image data, meaning that personal identity can never be captured. And, since the device does not require ambient light for optimal performance, it is suitable for applications in low light without losing accuracy.
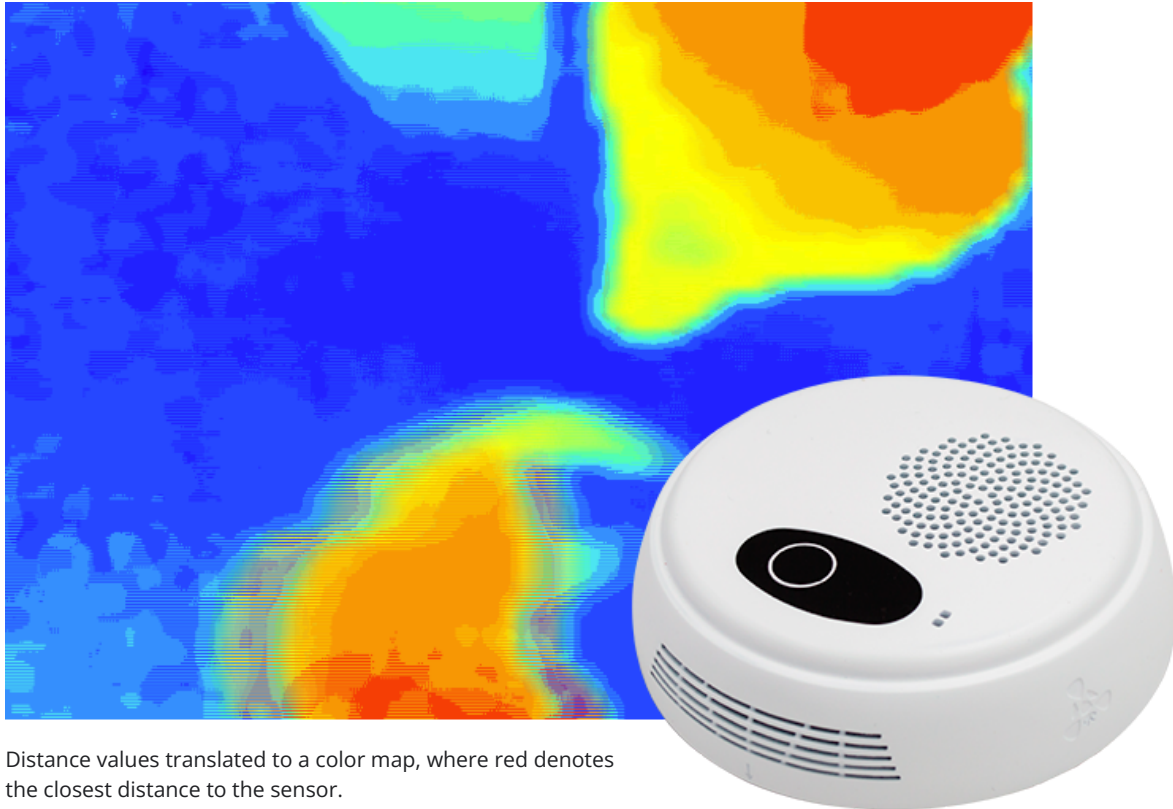
Distance values translated to a color map, where red denotes the closest distance to the sensor.
Picture may differ from the actual product.

Any questions? Contact us today!

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