



Get accurate multi-zone occupancy insights to maximize the management of meeting rooms through to large spaces

The Terabee People Occupancy Counting device provides **valuable, accurate occupancy insights** to enable improvements in energy management, space utilization and trigger greater operations and services efficiency. With the **widest area coverage in its class** and the **latest thermal technology**, the **GDPR-compliant-by-design** device is the ideal solution to monitor small spaces such as meeting rooms through to large spaces such as public buildings, open plan offices and coworking areas. People Occupancy Counting embeds an **auto-calibration algorithm** for quick, flexible deployment, to **enable immediate space performance improvements and related savings**.

Key product features

- Large floor coverage (i.e. 64 m² coverage from 2.40 m installation height)
- Multiple regions of interest (up to 8) to monitor/exclude specific areas
- GDPR compliance by design, unlike RGB cameras
- High human recognition rate via thermal signatures, reaching 98%+ accuracy
- Platform agnostic, send data to any third-party server. No recurring fee
- Direct analog output signal (0-10 V) proportional to room occupancy
- No battery ensures less maintenance, improved reliability and more uptime
- Low-light and full darkness operation
- Passive sensing = low power consumption, less interference

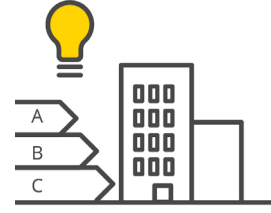
Applications



Space management

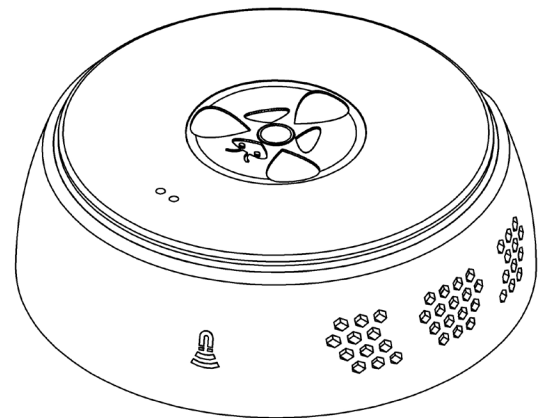
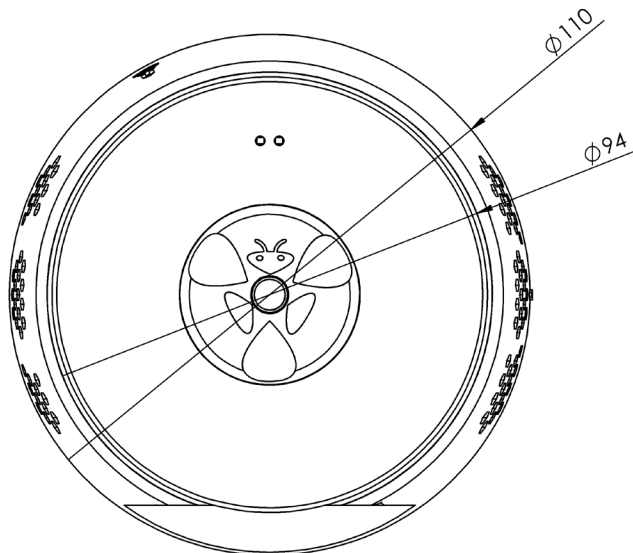
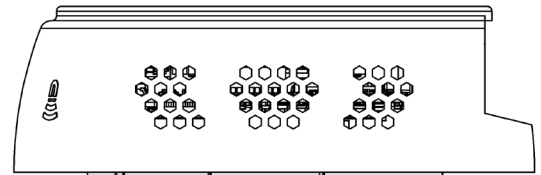
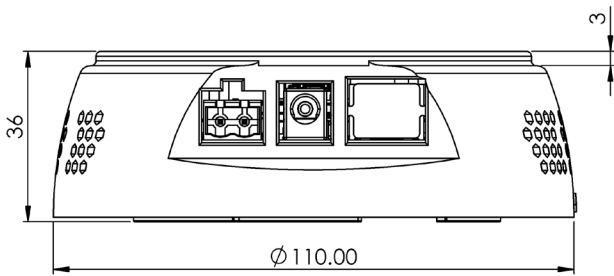


Space optimization



Energy management

Dimensions



Technical specifications

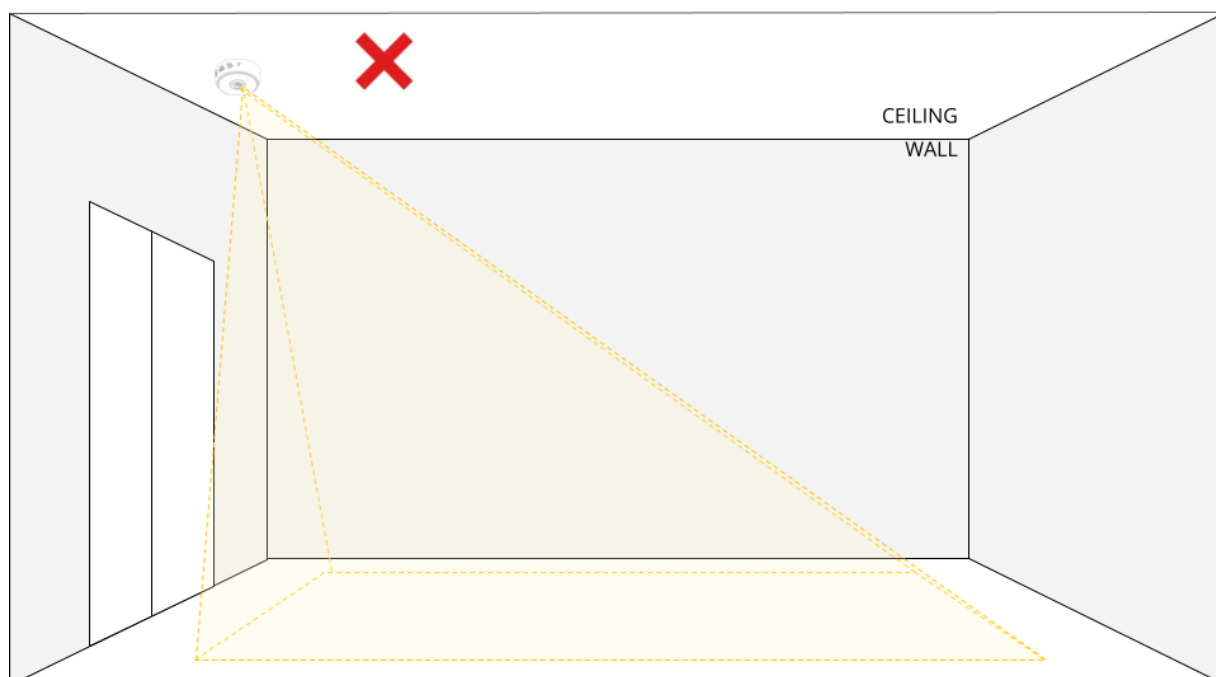
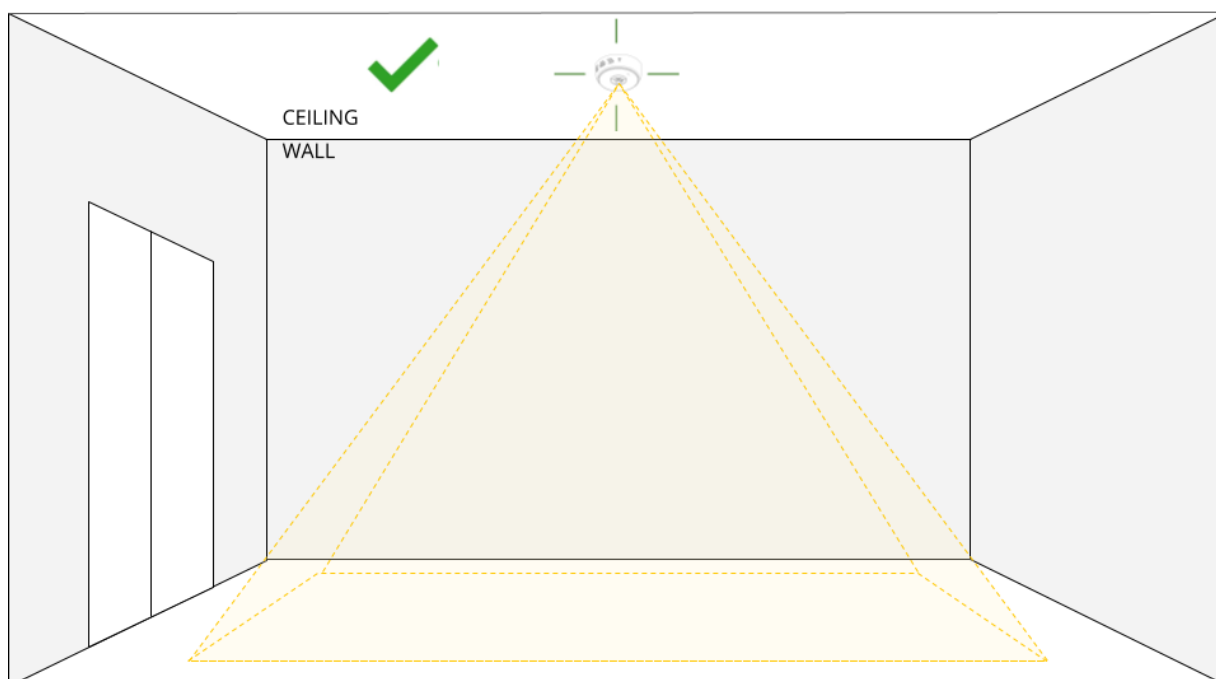
Product code		TB-POC	
Performances	PoE model	LoRa model	
Technology	Thermal sensing		
Field of View	160°		
Coverage area dimensions	64 m ² (8 m × 8 m square)		
Installation height range	From 2.4 m up to 4.0 m		
Multi-devices capability for large zone	Yes		
Use environment	Indoor		
Human recognition rate	98% accuracy ⁽¹⁾		
Frequency of data communication	Real-time or at predefined time intervals, on-event	At predefined time intervals (minimum of 2 minutes)	
Electronics	PoE model	LoRa model	
Power source	RJ45 (PoE IEEE 802.3af) 5.5 × 2.1 mm jack (10-30 V DC ± 5% - 1 A)	5.5 × 2.1 mm jack (10-30 V DC ± 5% - 1 A)	
Power consumption	2 W average		
Analog output	0-10 V proportional to room occupancy		
LED indicators	Two LEDs (power and status)		
Initialization time	Approx. 3 min		
Mechanics	PoE model	LoRa model	
Dimensions	Ø 110 mm × 36 mm		
Weight	140 g	128 g	
Housing material	ABS PU 8158		
Color	White and black (additional colors on demand)		
Operating temperature	-10° to 35°C		
Storage temperature	-20° to 60°C		
Installation	On-ceiling mounting with mounting plate, supplied. Optional: Terabee Recess Mounting Kit M		
Networking	PoE model	LoRa model	
Communication interface	Gigabit Ethernet Wi-Fi 2.4 GHz	Wi-Fi Access Point for configuration and local Wi-Fi Access Point for configuration, Wi-Fi 2.4 GHz LoRaWAN (1.0.3, Classe A) for data transmission	
Set up	Web GUI embedded on the device		
Ethernet/Wi-Fi communication	PoE model	LoRa model	
Recommended cabling	Cat 6 or later (Ethernet only)		
Addressing	DHCP, Static IP		
Device hostname	terabee-<serial_number>		
Data protocols	HTTP/HTTPS, MQTT/MQTTS		
Outbound traffic required on port	53, 123, 80/443, 1883/8883		
Domain whitelisting	*.terabee.com		
LoRa communication	PoE model	LoRa model	
Supported LoRaWAN frequencies	N/A	EU 863-870 MHz, US 902-928 MHz (coming soon)	
LoRaWAN activation methods	N/A	OTAA, ABP	
Antenna specification	N/A	+0.8 dBi, VSWR ≤ 2	
Remote device configuration	N/A	LoRa downlink commands	
Wi-Fi Access Point communication	PoE model	LoRa model	
Wi-Fi SSID	POC_<serial_number>		
Device hostname	poc<serial_number>		
Services	PoE model	LoRa model	
Extended warranty	1-Year and 2-Year		
IoT platform for data visualization	Upon request		
Device management services	Upon request		
Data hosting (when using IoT platform)	Cloud hosting (Datacenter in Amsterdam, Europe). Data storage for up to 2 years		
Conformity	PoE model	LoRa model	
Reference standard	CE, RoHS, UKCA (on-going)		

⁽¹⁾ Counting accuracy is assessed based on the total number of people present in a room in standard working environment conditions. In very diverse environments, such as with glass obstructions, fog or smoke, very high humidity, interference created by another IR sensor or with a metal surface, this value may change.

Device installation

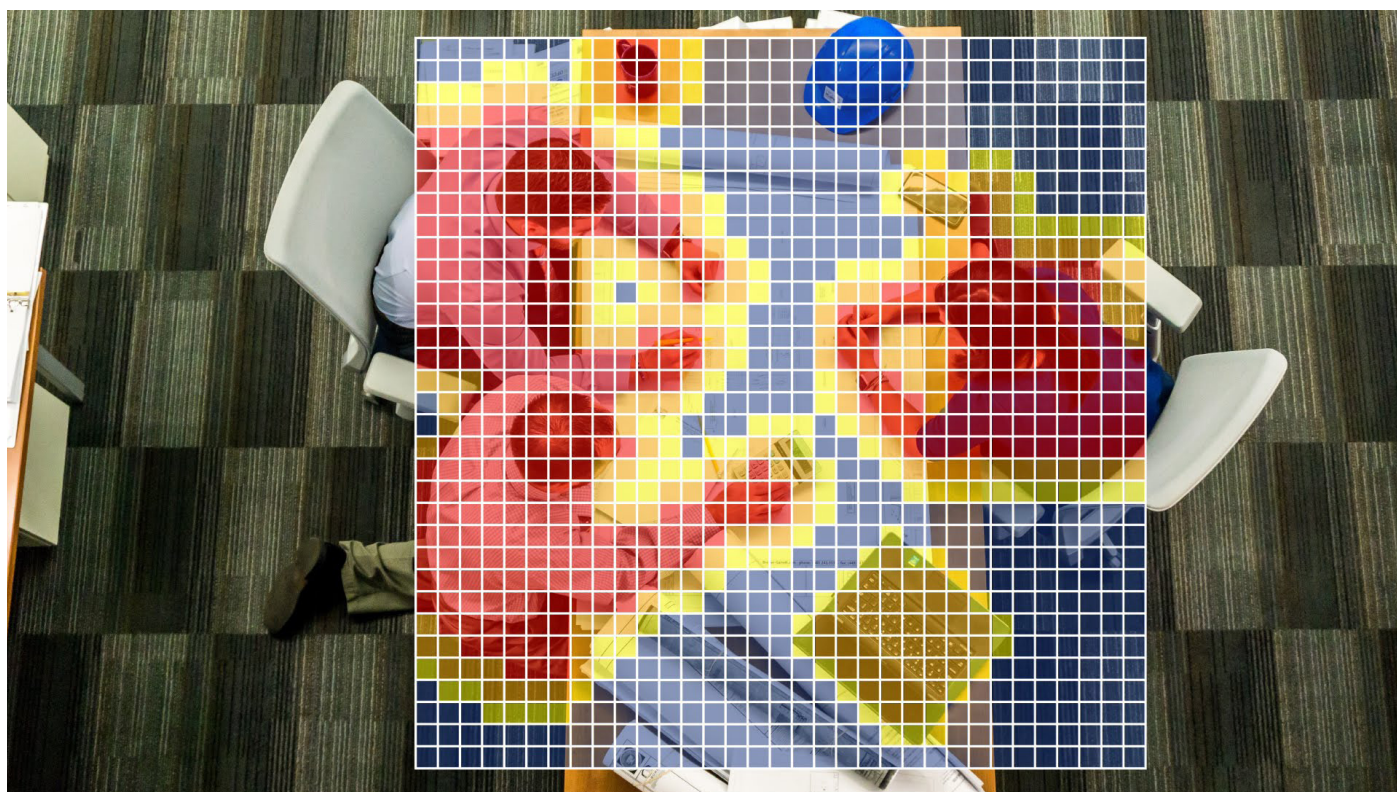
Terabee People Occupancy Counting is installed as simple as a household smoke alarm. For best performance, it should be placed centrally in the monitored room/area, better if not exposed directly to Infrared-reflective surfaces, such as large metal walls, which can act as mirrors.

Installation height (m)	Monitored area (m × m)
2.40 (min) - 4.00 (max)	8.0 × 8.0




Thermal sensing advantages

By sensing hot points with very low resolution images, Terabee People Occupancy Counting uses non-intrusive, anonymous thermal image data, so that personal identity can never be captured. And since the device does not need ambient light for optimal performance, it's suitable for applications with low-light and no light, without losing accuracy.



Any questions? Contact us today!

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