Litum

Transform. Reach beyond.

Material Handling Equipment:

Collision Warning Systems

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OUR VALUE

Turnkey Solution Provider

Global experience

- 17 years of global market presence operating in 45+ countries. All translated and reflected in current solution designs
- Variety of use cases
- Fortune 500 clientele

System integration

Agility

- Customizable
- Scalable

Proven customer satisfaction

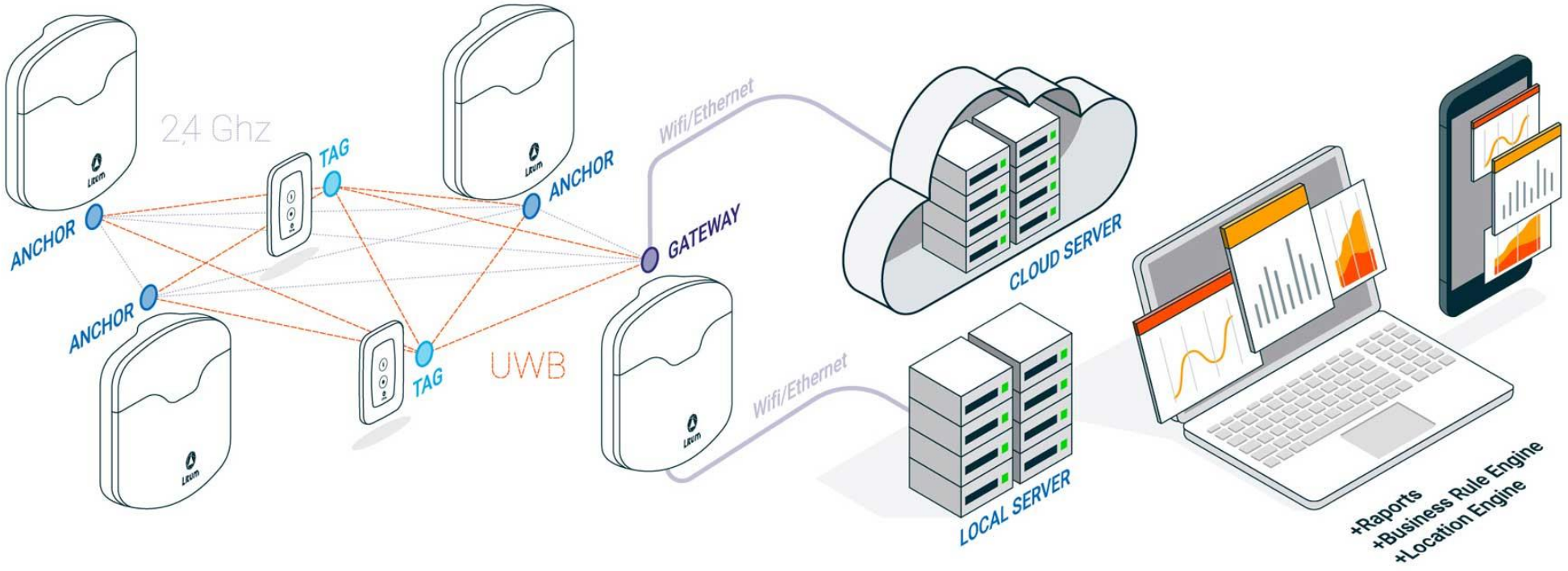
- Organically expands with clients due to successful ongoing support and customer satisfaction

Our references

includes major Fortune 500 companies

Ptt
Philip Morris International
Ferrero
Schneider Electric
Danone
Bosch
Smeco
GE
MAN
FCA Fiat Chrysler Automobiles
iff
Carlsberg
Whirlpool
Hyster
Metro Paris
Yale
amcor

LITUM RTLS MESH NETWORK



LITUM RTLS PLATFORM

Features

- Latest tech development environment
- No browser and OS dependency
- Mobile device support (OS and Android)
- Advanced reporting
- Map and satellite service support (e.g. Google maps)
- High security standards
- Supports SAML and OAuth based SSO integration
- Integration with 3rd party applications by using Restful APIs

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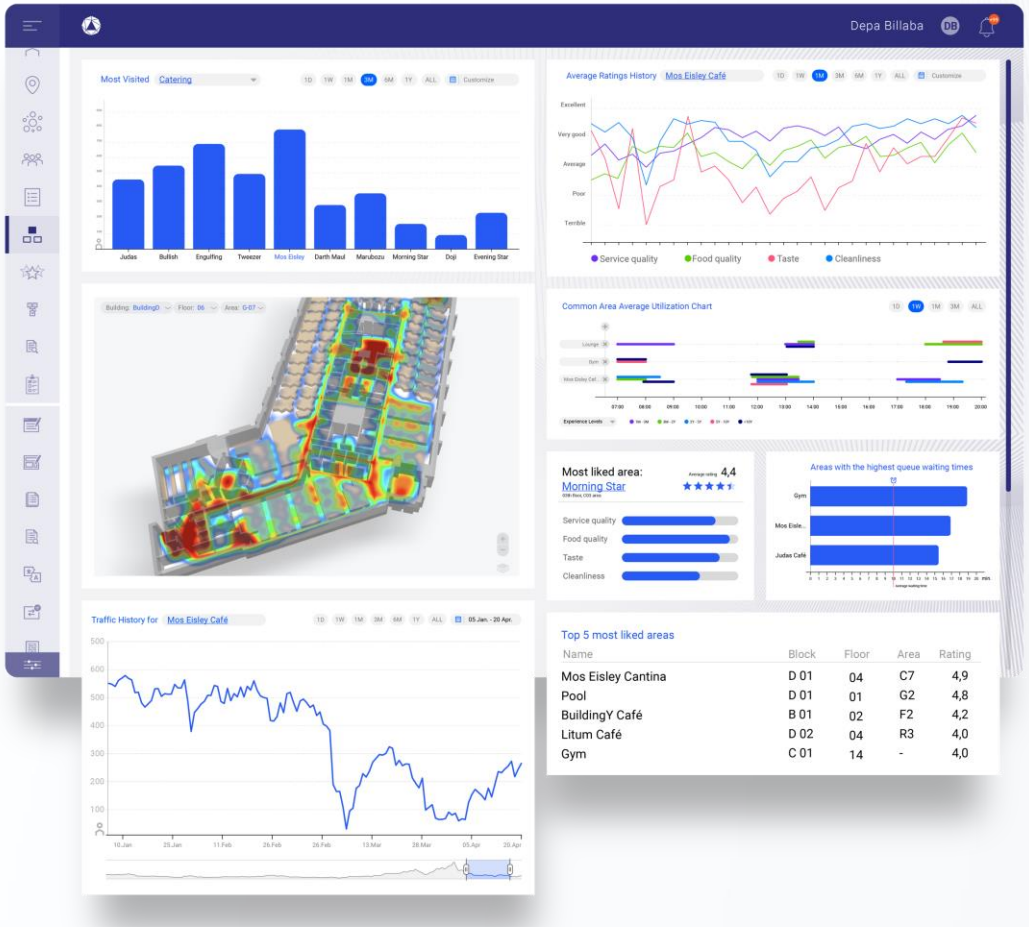
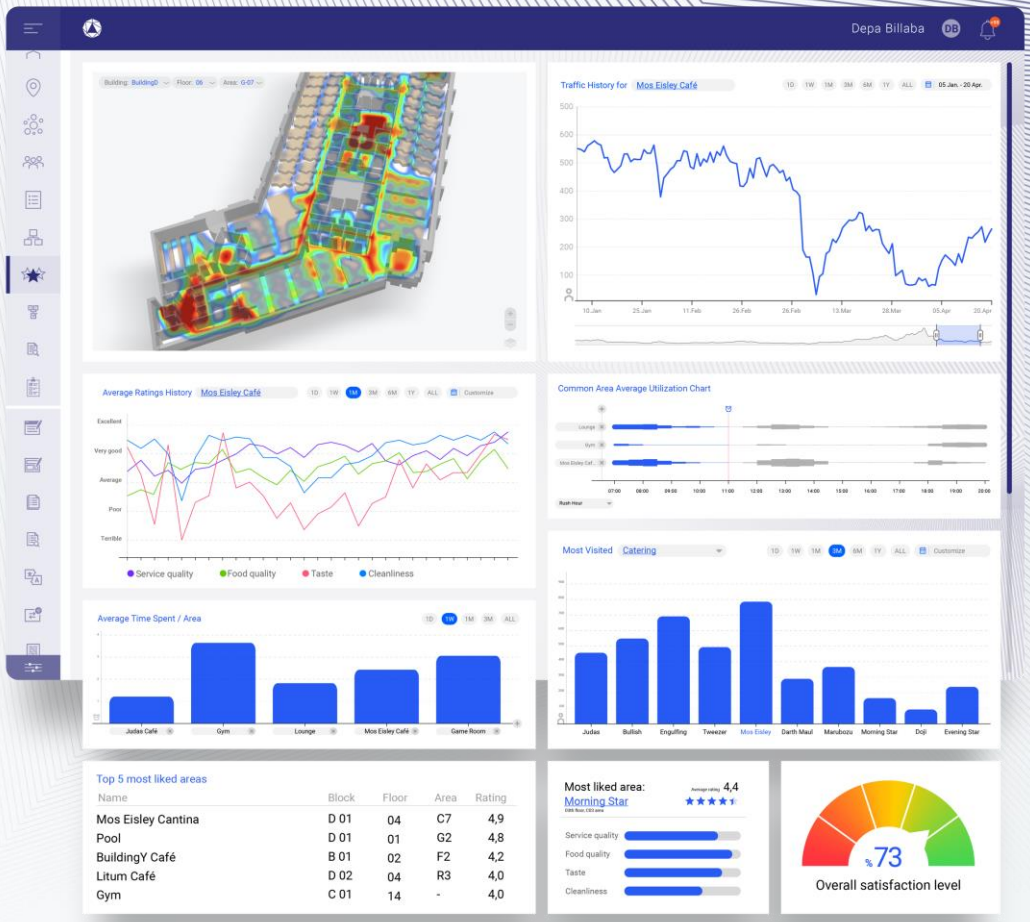
LITUM RTLS PLATFORM

DASHBOARDS AND REPORTS





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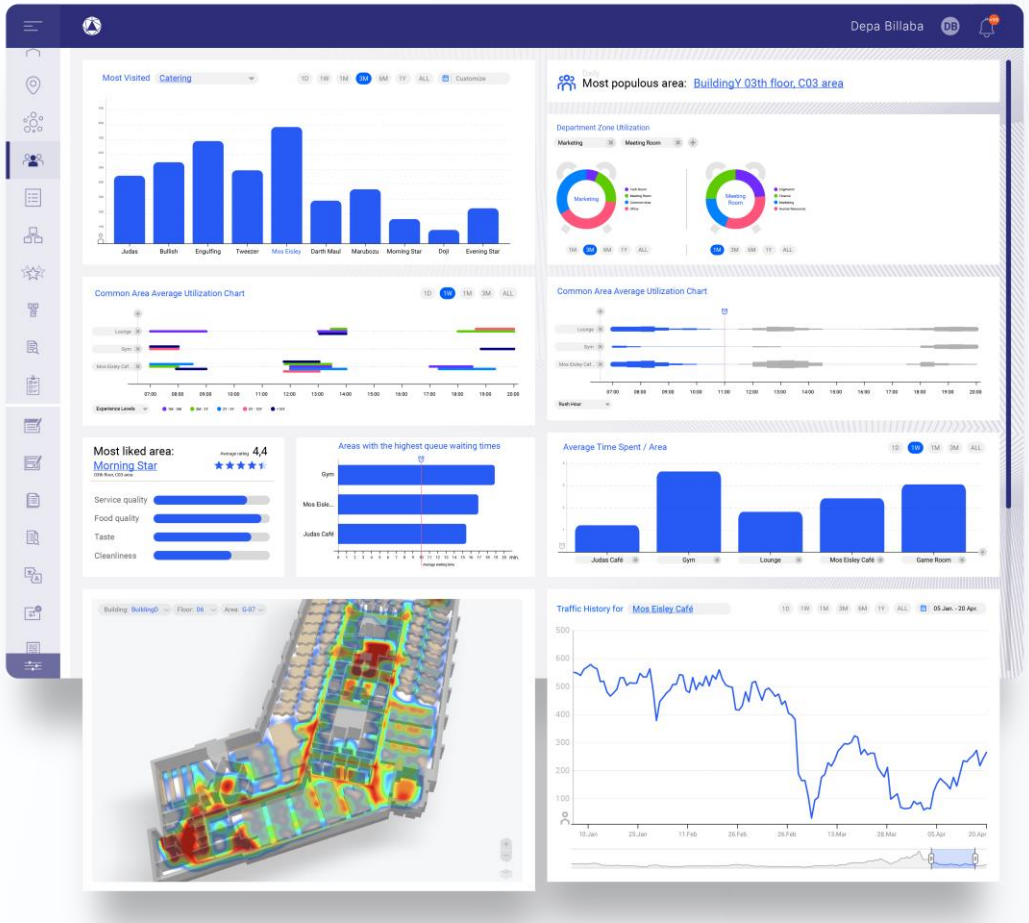
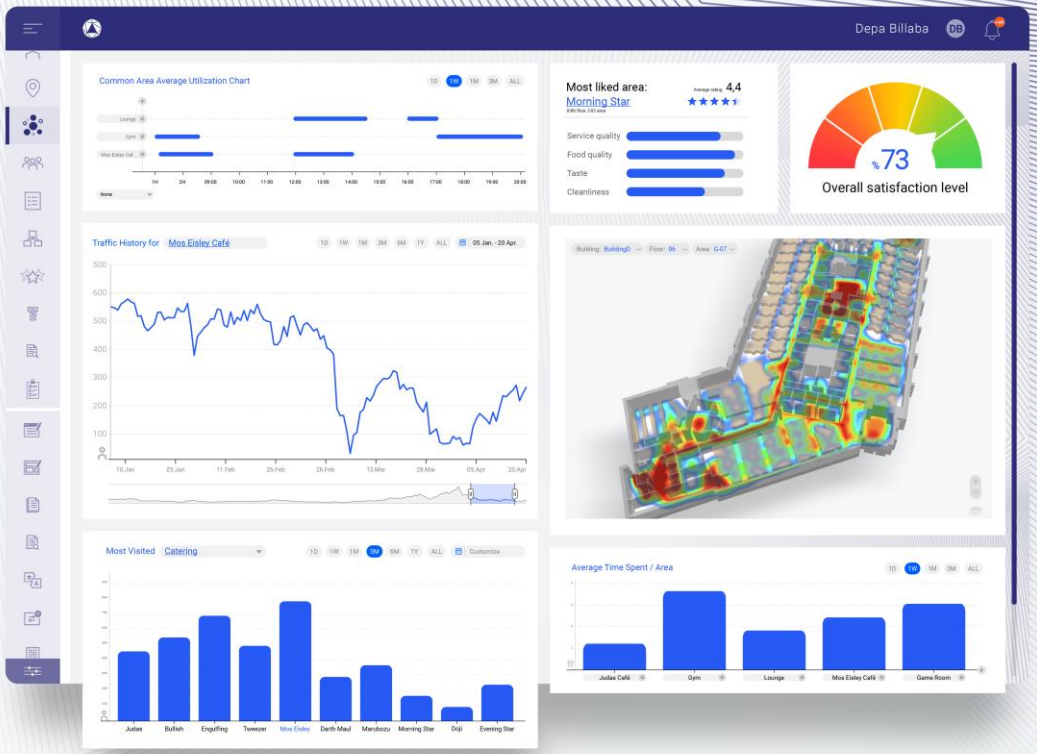
LITUM RTLS PLATFORM

DASHBOARDS AND REPORTS





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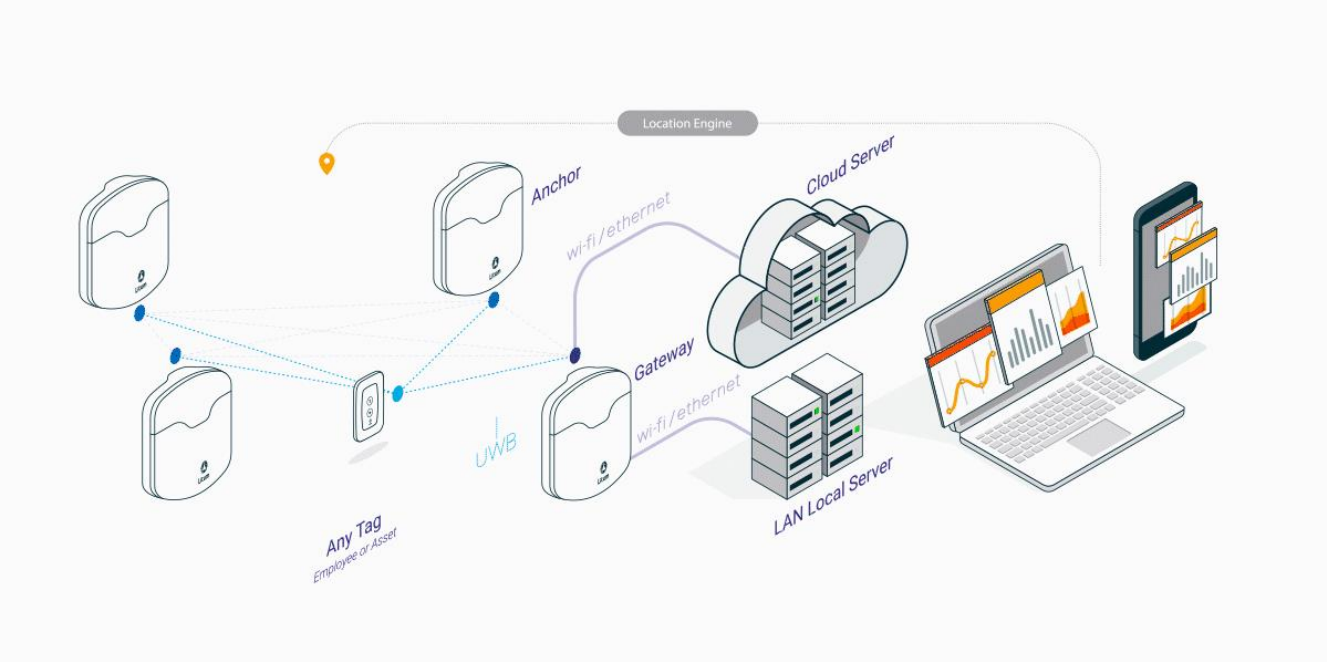
LOCATION ENGINE

- Distributed service architecture
- Supports parallel computing
- Multi-platform support (cloud or on-premise)
- 6x faster processing
- Improved location precision through filters
- Supports devices from different generations and technologies
- Supports trilateration (ToA), TDoA, Partical, 1D and Zonal location calculation methods



Collision Warning from Litum

Safety

Priority for maintenance, impacts TCO

In fact, studies performed by OSHA have shown a 20-40% reduction in costs after implementing safety plans. Other authorities, like H.W. Heinrich, have shown a 4:1 return on investment when safety is made a priority in the workplace.

Uptime

Minimized accident risk

Amazon has valued their downtime upwards of $180,000 per hour. In a smaller business, estimate is around $20,000 per day – still pretty significant

Plug and Play

Easy to install, no complex integration

Forklift collision warning operation

Forklift to Forklift

- When two forklifts approach each other accident risk is minimized by alerting the drivers based on preset rules for yellow and red zones
- Sound and light alerts

Forklift to Employee

- When a forklift gets within a preset distance to an employee wearing Litum Tag both parties are alerted
- Sound, light and vibration alerts

How it Works

- **Define Red/Yellow/Green states**

  Default settings

  - Green – nothing within 11m (Allow full speed)
  - Yellow – Tag detected 6 – 11 m away (reduce speed zone)
  - Red – Tag detected closer than 6m (slowest speed)

- **Reconfigure states to suit the site**
  - Sniffer device connected tablet via USB
  - Used to configure tags

Module	Base Kit	Optional
Essential Safety	Litum Forklift Collision Warning w/audiovisual alerts	Personnel Safety (Additional personnel tags required

Program Components

LITUM® FORKLIFT SAFETY SOLUTION COMPONENTS

Litum Collision Warning

Litum Collision Relay

Litum Alert Box
(New design on the way)

Tags for employee safety

Litum Tags - Badge &
Compact formats

Sniffer

Orbit

Accessories

Wireless charger

Power cables
(Connect to FL battery)

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Features & Benefits

FEATURES

- Compact and robust design
- Optional relay output for slow down
- Different mounting types
- High processor performance for business rules

BENEFITS

- Automatic operator detection
- Configurable warning and alarm zone distances
- Alert box with for audiovisual alerts.
- Improves forklift movements to avoid collision
- Highly accurate location detection
- Edge processing – immediate alert/action

USE CASES

- Vehicle tracking
- Zone access control
- Proximity detection
- Vehicle – Vehicle & People – Vehicle

Item	Product Name	Comm. Port		Indicators
		RS485	*Relay Output*	*(Alert/Siren/Buzzer)*
1	Litum Collision Relay	✓	✓	x
2	Litum Alert Box w/ wireless connection to anchor	x	x	Light + Siren
3	Litum Orbit (1 per deployment) – wireless programming device	x	x	x
4	Litum Tag Badge	x	x	Light + Vibration
5	Litum Tag Compact	x	x	Light + Vibration
6	Power Cable for Litum Collision Warning Relay			

Technical Specifications for Litum Collision Warning System

		Litum Collision Relay	Litum Alert Box	Litum Tag Badge	Litum Tag Compact	Litum Sniffer Orbit
General	Dimensions	104 x 155 x 60 mm (4.10 x 6.10 x 2.35 in.)	65 x 154 x 59 mm (2.5 x 6.0 x 2.3 in.)	63 x 90 x 11 mm (2.5 x 3.5 x 0.4 in)	37 x 45 x 15 mm (1.5 x 1.8 x 0.6 in)	50.5 x 69.5 x 21 mm (2.00 x 2.75 x 0.85 in)
	Weight	256 g (9.05 oz)	325 gr. (11.4 oz)	44 g (1.6 oz)	29 g (1.1 oz)	40.2 g (1.40 oz)
	Casing	PP GF %30 V0	ABS	ABS	ABS	ABS
	Remote firmware update	✓	✓	✓	✓	✓
	Power / Battery	9 – 30 V	9 – 30 V	3.7V 700 mAh Li-Po	3.7V 330 mAh Li-Po	Mini USB
Features	Indicators	LED (RGB)	LED + Siren	LED + Vibration	LED + Vibration	LED
	Frequency	2.4 GHz ISM & UWB channels	Wireless connection to anchor	UWB channels	UWB channels	UWB channels
Other	Certification	FCC	FCC	FCC, RoHS	FCC, CE, IC	FCC
	Accesories	Power Cable	Power cable	Qi Wireless charging	Qi Wireless charging	Mini USB

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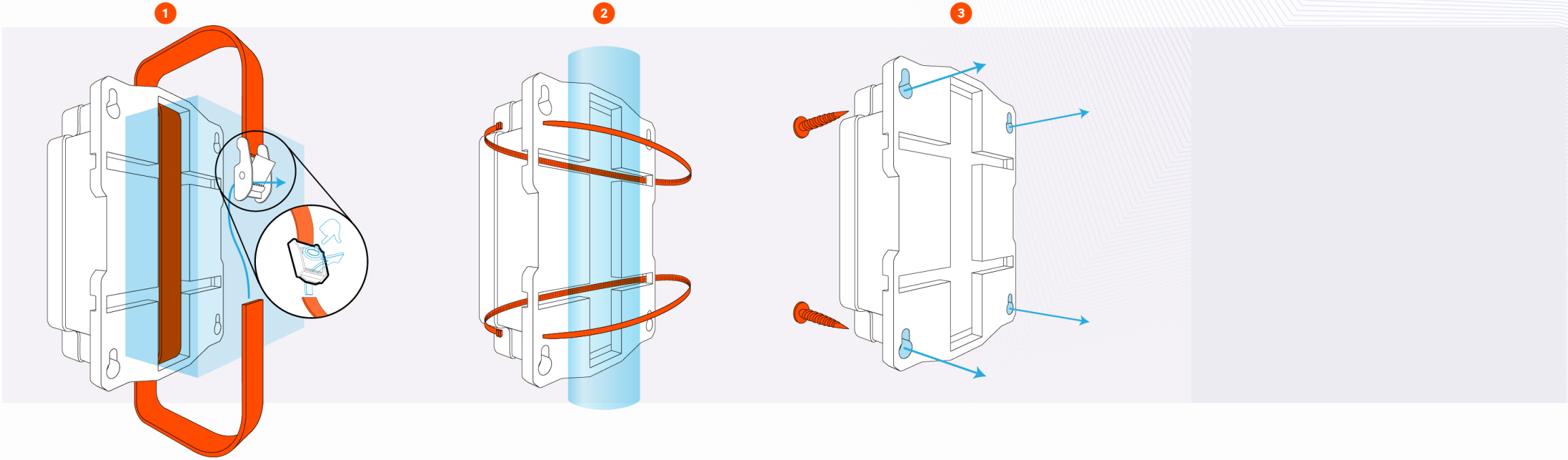
Installation & Operation

Plug & Play Installation



Belt

Cable tie

Screw

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Thank you!

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