

Ultra Wide Band Radar, Energy Switch & Air quality sensor

Key benefits for next generation smart building

- Fast installation time. Re-using existing mains power wallsocket/outlets
- Person tracking using long range radar
- Completely invisible for users/visitors
- Infinite wireless scalable for large buildings. Worldwide allowed
- Operates outside congested wifi bands
- UWB Radio, 3-7GHz, IEEE 802.15.4a
- Firmware upgrade over the air (AES security, unique ID)



Indoor localisation < 20cm accuracy¹

Typical indoor range in commercial buildings for AIRTLS UWB equipment is 30m at 6.8Mbps by using special electronics to increase sensitivity and selectivity of the radio transceiver.

Radio signals travel through walls enabling a true 3D tracking environment of the whole building. The ultrawideband radio guarantees a reliable connection as a data backhaul for bi-directional communication. UWB operates outside the WiFi bands using worldwide allowed unoccupied frequencies.

Network connectivity to other IoT devices.

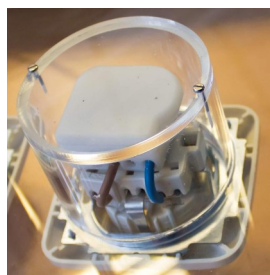
LINO anchor provides true smart building.

Providing all smart building functions for its users in commercial and residential buildings.

A) For users, tag localisation helps retrieving valued objects.

B) Presence detection and tracking of persons via the build in long range radar. Providing input for 24/7 security services and building automation. Users can override building automation decisions by means of voice commands.

C) A healthy environment for occupants is save guarded by 3 way measurement of air quality (CO₂,temperature,humidity)



AIRTLS LINO inside mains powered wallsocket

Partnumber	UWB	Energy	Switching	Air Quality	Radar	Voice	Available
LINO WHITE		v					Q1 2024
LINO YELLOW		v	v				Q1 2025
LINO GREEN		v	v	v	v	v	Q2 2025



Security radar & access control

UWB indoor tracking of tags

Switching mains power 85-250VAC

Energy monitoring

Air Quality: vox and CO₂

Temperature & Humidity

Voice commands

Network to all IOT devices

3D visualisation

Infiniscale[®], wireless scalability

42000 trackers per zone (200x200m)²

Dimensions	41 x 37 x 14.8 mm
Radar	Person tracking + Presence
Power switch	2000 Watt, 1.000.000 times
CO ₂ NDIR	100-4000 ppm
Humidity	0 to 100% relative humidity
Temperature	±0.5 °C, -10 to +70 °C
Microphone	62.5 dB SNR
Radio	UWB 3-7GHz, BLe 2.4GHz

AIRTLS
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¹: Accuracy range from sub cm accurate in line of sight condition in calibrated environnement to few decimeter accuracy in standard commercial building environment with brick or concrete walls
²: Standard firmware supports 20822 trackers at 40ms latency in data collection per typical zone of 200x200m, per UWB channel. 2 UWB channels can be active.
High Capacity firmware support 84000 1Hz trackers at a higher latency.