

Indoor PoE Anchor

The Indoor Power-over-Ethernet Anchor Gen.2 is used to form the mesh infrastructure of Redpoint's ultra-wideband (UWB), RTLS solution. Using a custom configuration of these wall-mounted radio anchors, you can create a dynamic network that enables communication with any UWB device — such as the Redpoint asset tag or badge tag — located within the network.

- The Indoor PoE Anchor is a full-function anchor designed to be deployed indoors.
- It is easily mounted to a surface such as a wall or column using the provided mounting bracket.
- The device may be connected directly to a PoE switch to provide data connectivity as well as power or may be used stand- alone as part of a larger mesh network.
- The anchor provides coverage over a maximum radius of 50m (170'). The antenna power is configurable for installations where smaller coverage areas are desired.
- When used with Redpoint's tags, the anchor provides 20cm (8") accuracy in two dimensions over its full coverage area.
- All firmware can be upgraded over-the-air when connected to a UWB mesh network, as well as over the wired network.

Redpoint provides a total RTLS solution.

The Indoor PoE Anchor Gen.2 is the starting point to build your real-time location system network. Contact Redpoint about the other products we offer to complete your RTLS solution.

Features

Accuracy

Up to 20cm (8") accuracy with a two-dimensional network configuration.

Range

Omnidirectional coverage with 50m (170') range to create the UWB mesh network.

Power

Power-over-ethernet provides constant DC power as well as data connectivity when connected to a switch.

Easy to update

Over-the-air (OTA) updates provide full upgradeability and customized configuration.



Redpoint Indoor PoE Anchor Gen.2

Redpoint Positioning Corp.

System

Parameter	Value
Operation Modes	Tracking, navigation
Typical Accuracy	20cm in optimal conditions
Tag Update Rate	Configurable: 1Hz, 2Hz or 4Hz
Tag Density	Tracking mode: dependent on update rate. Navigation mode: unlimited
Network Topology	Full mesh, self-organizing, self-healing
Network Scale	Each RTLS network may support up to 65,000 anchors.
Communication Range	50m line-of-sight in typical working environment
Operating Frequency	3.5 - 6.8 GHz
Channel Bandwidth	500 MHz
Peak data rate	850 kbps

Ethernet

Parameter	Value
Data	Auto-detect 10/100Mbps
PoE Mode	IEEE 802.3af/at and passive mode*

^{*}In PoE passive mode, the anchor accepts any voltage from 6v to 60v through a PoE injector.

Mechanical & Environmental

Parameter	Value
Anchor	87mm x 67mm x 27mm
Temperature	-20°C to 70°C
IP Rating	None. Indoor use only.

DC Characteristics

Parameter	Value
Voltage	Min: 6V Max: 60V
Current	110mA@6V(anchormode) or 180mA@6v (bridge mode)

Ordering information

The Indoor PoE Anchor Gen.2 may be ordered directly through Redpoint. Place a request using part number 9000-0411.