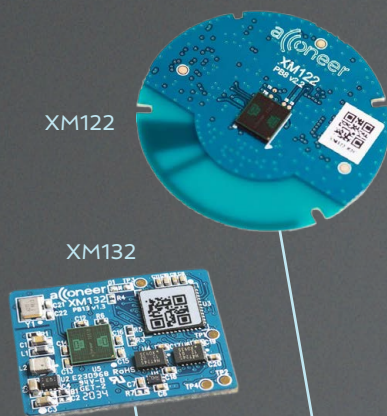


Smart presence



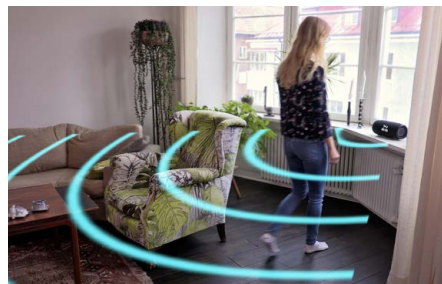
Reference Application

Proof of concept
for smart presence
use case

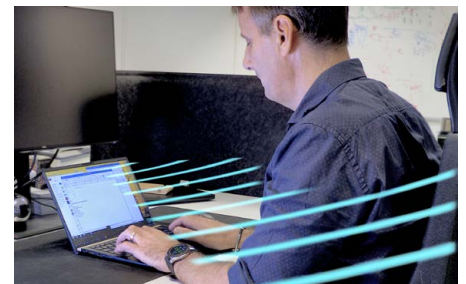


EXPLORE THE NEXT SENSE

Use this reference application together with the XM132 entry module or the XM122 IoT module to speed up development and shorten time to market for a range of smart presence use cases, such as detecting people in rooms, wake-up functionality and child presence in cars.



Predict intention as someone approaches or passes by a device



Add security by locking a computer as its user leaves the desk

Sensor was mounted on wall, 1.2 m above floor



Detection distance was set at 2 m



No lens was used for the reference measurements

Update rate	Power XM122	Power XM132	Trigger distance
10 Hz	3.45 mW	6.19 mW	1700 mm
5 Hz	1.76 mW	3.05 mW	1600 mm
2 Hz	0.68 mW	1.19 mW	1200 mm
1 Hz	0.35 mW	0.6 mW	400 mm

The higher the update rate, the quicker the detection

Memory usage

Flash	60 kB
Static memory	7kB
Stack	1.3 kB
Heap	6 kB

The source code for this reference application can be used as a starting point for all types of presence detection. The reference application is by default tuned to detect presence up to 4m, 80 degrees horizontal without lens and 6m, 25 degrees horizontal, provided a lens is used.

The update rate of the sensor is 4 Hz while in wake-up mode and 20 Hz once movement has been detected. These parameters should be adjusted to match the use case and the targeted requirements.

Download the reference application at:
www.developer.aconeer.com