

OPERATIONAL DESCRIPTION

Ubisensor V1.0

FCC ID SEAUBISENSOR10

The Ubisensor V1.0 is a basestation used by the Ubisense In-Building Location System, which supports the real-time location of objects within buildings. It detects ultra-wideband (UWB) pulses emitted by wireless tags (Ubitags) located inside the building, allowing the 3D position of the tag to be found. The use of UWB technology enables greater positioning accuracy within buildings than other wireless technologies, because it is much less susceptible to multipath interference effects. Applications of the system include healthcare, workplace productivity, security, retail management and manufacturing.

The Ubisensor V1.0 is a composite device consisting of a conventional FM radio transceiver operating in the range 908.36-915MHz (FCC ID SEAUBISENSOR10, which is subject to certification, the application for which is supported by this document), and an associated Class A digital device (which will be subject to Verification Authorisation under section 15.101b of CFR47). The conventional FM intentional radiator section of the device utilises two antennas for the purposes of antenna diversity. Both antennas are permanently attached and are integral to the device.