

## OPERATIONAL DESCRIPTION

Ubitag V1.0

FCC IDs SEAUBITAG10-U, SEAUBITAG10-F

The Ubitag V1.0 is a wireless device intended to be used for the real-time location of objects within buildings. It transmits ultra-wideband (UWB) pulses which are picked up by a network of basestations (Ubisensors) placed 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 Ubitag V1.0 is a composite device consisting of an ultra-wideband transmitter (FCC ID SEAUBITAG10-U), a conventional FM radio transceiver operating in the range 908.36-915MHz (FCC ID SEAUBITAG10-F), and associated digital circuitry. It is never the case that both the ultra-wideband transmitter section of the device and the FM radio transceiver section of the device are active simultaneously. Both the ultra-wideband transmitter and the conventional radio transceiver utilise permanently attached antennas that are integral to the device.