

OPERATIONAL DESCRIPTION

UBITAG7024

FCC ID: SEATAG21HH

The UBITAG7024 is a wireless device intended to be used for the real-time location of personnel and hand-held objects. It transmits ultra-wideband (UWB) pulses which are picked up by a network of basestations (Ubisensors), 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 and retail management.

The UBITAG7024 is a composite device consisting of an ultra-wideband transmitter, a conventional radio transceiver operating in the range 2402.5-2480.5MHz, and associated digital circuitry. It is never the case that both the ultra-wideband transmitter section of the device and the conventional 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.

The UBITAG7024 will not transmit ultra-wideband signals unless it receives suitable trigger commands (over the range 2402.5-2480.5MHz conventional radio link) from an associated base station. It is programmed to cease transmissions within 10 seconds unless it receives an acknowledgement from an associated receiver that its UWB transmission is being received.