

The AeroScout T14E Bi-directional Tag is a component of the enterprise-level visibility solution based on standard Wi-Fi communication for location-based applications. The T14 Tag adds further flexibility and scalability to locate patients across a wide variety of applications.

T14E consists of LF receiver and WiFi transceiver.

LF receiver (AS3933) connected to two LF 125KHz antennas is used to turn-on the tag from sleep mode. Once a LF signal is detected by the LF receiver, the tag transmits its ID by WiFi back to the control, which gets its RSSI to estimate its location.

The tag contains on-board motion sensor. The motion sensor can be configured to trigger alerts. It also enables different transmission intervals for tags when they are stationary or in motion – which reduces unnecessary network traffic and conserves battery life.

The tag has a rechargeable battery 3.6-4.2V.

The WiFi transceiver is based on TI CC3120. It is a one chip solution, supplied by 3V which is provided by DC Buck switch mode module. The WiFi operates on 802.11b/g ch1-ch11 (2412-2462MHz -US) and ch1-ch13 (2412-2472MHz - Eu). The chip has a 40MHz reference clock, and the RF printed antenna covers 2412-2472MHz WiFi band (US & Eu)