

Description of the ETC tag

The ETC equipment tag is a transceiver which receives a modulated low frequency signal at the frequency of 125 kHz and transmits modulated RF signal at the frequency of 433.92 MHz. In addition it has a motion sensor and a tamper switch. It has low frequency receiver and RF transmitter.

The ETC Tag is a miniature, unified infrared and active multi-purpose, local positioning RFID device. The tag is designed for asset or people identification and tracking; or emergency and protection signaling. It is attached to an asset for tracking and monitoring. The tag will generate an alarm if the asset is moved to a prohibited location (such as an exit) or if an attempt is made to remove the tag from the asset.

The ETC Tag transmits periodic RF based status messages at 433 MHz as well as optional infra-red signals. These signals are received by Elpas readers installed throughout the indoor facility. Elpas LF Exciters transmit an RF based ID at 125 kHz creating a 3 meters in radius field. When an ETC enters the LF field, the tag detects the LF message and transmits a special message indicating its entry into the field. This feature is used to warn when an attempt is made to remove an asset from its designated area. Other special messages are transmitted when the tag's button is pressed or when the tag is tampered.