



## 5-RLE00125 Operational Description

Elpas Low Frequency (LF) Exciters from Visonic Technologies are supervised\*, short-range, wireless emitters that add pin point detection functionality to EIRISTM based RFID installations.

Elpas Low Frequency (LF) Exciters can be installed surface mounted on walls or on fixed or in dropped (false) ceilings. Elpas LF Exciters are deployable in either a basic stand-alone configuration designed to cover normal size single doorways or in a variety of different master-slave configurations (1 master and up to 2 slave units) for accurate, synchronized coverage of large indoor, open complex-shaped areas.

Elpas LF Exciters emit harmless, adjustable low power, low frequency; magnetic (125KHz) fields up to 3m (10ft) in radius. The emitted fields are user tunable so that they can precisely cover any indoor doorway or restricted entrance/exit area. As a result, whenever an active Elpas RFID tag or badge (i.e. ETC, WTA, Baby Tag, Personnel Badge) enters the magnet field; the corresponding LF Exciter automatically triggers the moving RFID device to transmit special data messages (including the Exciter ID code). The messages are immediately received and relayed by strategically located Elpas RF readers for monitoring, alert notification and subsequent event logging.

\* LF Exciters (from hardware Version C) transmit operational RF status messages plus output power trouble alert messages configurable and supervised via EIRIS software.

### **LF Transmissions**

Transmission Rate: Continuous bursts of LF transmissions (each about 12ms in duration).  
(ID code = OOODXX where XX is ID number of the LF exciter)

### **Supervision RF Transmissions**

Transmission Rate: 1 RF transmission (about 2ms in duration), 10 seconds apart.  
Transmitted Message Type: 433.9 MHz Elpas Tag (badge) protocol including ID LF Exciter code (ID code = OOODXX where XX is ID number of the LF exciter).

### **Additional Notes**

The device does not simultaneously transmit LF and RF messages. The LF transmissions are paused during the transmission of the supervision messages for a period of about 2ms.

The RLE is powered by a 24V DC Source.

An onboard LED indicates correct operation.