

## Low Frequency (LF) Exciter

### Description

The Elpas Low Frequency (LF) Exciter from Visonic Technologies is a supervised, short-range, UHF emitter that adds pin point detection functionality to any Elpas safety, security or monitoring installation.

The LF Exciter is engineered to emit sphere shaped low-power electromagnetic fields (125KHz) up to 3m (10ft) in radius. These harmless LF fields are user adjustable, so that they can be tuned to precisely cover most indoor doorways or entrance/exit areas. So, whenever an individual or asset bearing an Elpas active RFID tag enters the electromagnetic field generated by the exciter; the mobile tag is prompted to transmit its pre-programmed data messages (including the exciter's Neuron ID). The messages are instantly detected by the Elpas RF reader infrastructure and are locally processed and/or relayed over the LonTalk network to the EIRIS server machine in support of the configured Elpas application.

The LF Exciter also includes an on-board UHF (433.92 MHz) transmitter, which continuously broadcasts real-time device supervision alert messages for keeping repair personnel informed of possible maintenance issues related to the device.

Architecturally attractive and unobtrusive, the Elpas Low Frequency (LF) Exciter is easily surface mounted on solid walls and ceilings or flush mounted into dropped (false) ceilings. The exciter is deployable as a stand-a-lone device, designed to cover normal interior single or double doorways or in a flexible master-slave configuration suitable for coverage in large, open indoor spaces.



Elpas Low Frequency (LF) Exciter  
Shown with a Surface Mount Plastic Ring

### Product Features

- Unobtrusive, streamlined tamper resistant design
- Quick-connect power and data interfaces
- Adjustable magnetic field up to 3m (10ft) radius
- Master-slave configuration for large area coverage
- Efficient onboard circuitry, reduces power consumption
- RF range up to 20m/65.5ft (360° coverage area)
- Unique location indication using internal ID code
- Onboard supervisory message transmitter

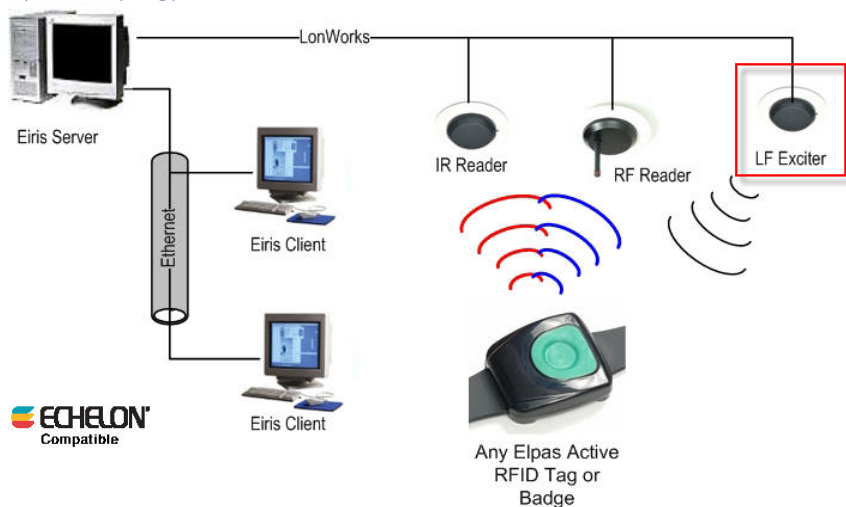
### Applications & Uses

- Patient identification
- Assisted living facilities
- Infant protection (Elpas BabyMatch™)
- Wandering patient supervision
- Entrance/Exit based alarming
- Asset management & loss prevention
- Artwork and museums
- Guards & security personnel safety

## Elpas Low Frequency (LF) Exciter– Data Sheet

LF Specifications	
Technology	LF electromagnetic field (125KHz)
Effective Range	Up to up to 3m (10ft) sphere shaped radius
Transmission Rate	Continuous bursts of LF transmissions (each about 12ms in duration)
Output & Format	3 byte messages (Preamble, Exciter ID and CRC)
Output Power	Less than 60 dbµv at 30 meters (100ft) Adjustable, using on-board trim control potentiometer
Output Bit Rate	2,000 bits per second
RF Specifications	
Technology	UHF RF (433.92 MHz)
Effective Range	20 meters/65.5 feet (360° coverage area)
Transmission Rate	1 RF transmission (about 2ms in duration), 10 seconds apart
Electrical Specifications	
Status Indicators	<b>Power On:</b> Red LED pulses 5 times upon power on; then remains constant. <b>Invalid ID Code:</b> Red LED pulses continuously; Buzzer beeps repetitively.
ID Address	Set by on-board; 8 position DIP-switch
Power Requirements	24 VDC nominal $\pm$ 30%; 200mA
Power Consumption	Approx 2W (power consumption is a function of address (per DIP switch settings, where FF=max and 00=min)
General Specifications	
Construction	Polycarbonate plastic
Dimensions	17cm x 4 cm (6.6 inches x 1.6 inches)
Weight	200 grams (7.054 ounces) approximate
Device Interfaces	RJ-11 (6P6C) power source connector; RJ-45 (8P8C) master - slave connector
Operating Environment	Temp: -10°C to 70°C (14°F to 159°F) Humidity: 20% to 80% non-condensing
Remote Supervision	EIRIS 4.5 (or higher) Enterprise Software
FCC & CE Compliance	FCC ID: 04X5-RLE00125, FCC PART 15, Sub-part B, Class B, Sub-part C; EN300220-1, EN300220-2, EN300330-1, EN300330-2, EN301489-1, EN301489-3, EN60601-1-2, CISPR 11, EN60950-1, IEC60601-1, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-6
Warranty	1 year limited warranty

### System Topology



### Office Locations

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### Ordering Information

Part Number	Description
5-RLE00125	Exciter, LF, Standalone
5-RLE00125-W	Exciter, LF, Standalone, White
5-RLE00125-1	Exciter, LF, Master
5-RLE00125-2	Exciter, LF, Slave, w/M-S Cable
5-RLE00125-1W	Exciter, LF, Master, White
5-RLE00125-2W	Exciter, LF, Slave, w/M-S Cable, White

### Accessories

Part Number	Description
5-RDT09113	Surface Mount Plastic Ring (5 units)
5-RDT09100	Mounting Bracket (5units)
5-ERS02721	Reader Cable 2.5m/8.25ft
5-ERS02721-1	Reader Cable 5.0m/16.5ft
5-LFM00125	LF Field Meter

### About Visonic Technologies

Visonic Technologies (VT), a fully owned subsidiary of Visonic, Ltd. (VSC.L) is a global leader in enterprise-class, active & passive RFID/ RTLS real-time visibility solutions. Sold under the Elpas, SpiderAlert, VisAccess and EIRIS system names, VT's products deliver workforce identification and safety; supply-chain logistics, asset protection and facility supervision.



Manufactured In Israel

