

High Power LF Exciter

Description

The Elpas High Power LF Exciter from Visonic Technologies is a supervised, extended-range, UHF emitter that adds pin point detection functionality to any Elpas safety, security or monitoring installation.

The High Power LF Exciter is engineered to emit sphere shaped low-power electromagnetic fields (125KHz) up to 5m (15ft) in radius. These harmless LF fields are user adjustable, so that they can be tuned to precisely cover most interior or exterior building exits and entrances. Consequently, 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 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.

Enclosed in an architecturally attractive; (IP65) water rated enclosure, the exciter is easily wall, ceiling or post mounted. High Power Exciters are deployable as a single stand-a-lone device, designed to cover large interior single or double doorways or in a flexible master-slave configuration suitable for coverage of large, open interior or exterior spaces.



Elpas High Power LF Exciter



Product Features

- Attractive, waterproof (IP65) enclosure
- Quick-connect power and data interfaces
- Adjustable magnetic field up to 5m (15ft) 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

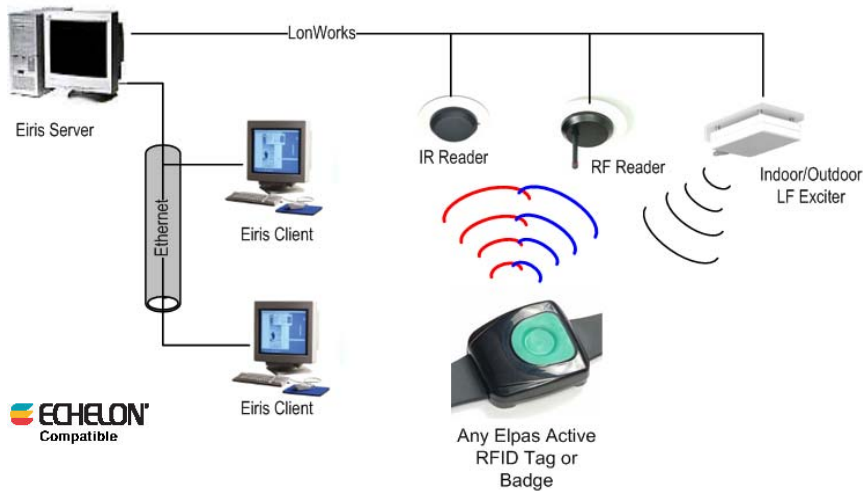
Applications & Uses

- 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 High Power LF Exciter– Data Sheet

LF Specifications	
Technology	LF electromagnetic field (125KHz)
Effective Range	Up to up to 5m (15ft) 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	Power On: Red LED pulses 5 times upon power on; then remains constant. Invalid ID Code: 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 (500mA at start-up)
Power Consumption	Approx 2W (power consumption is a function of address (per DIP switch settings, where FF=max and 00=min)
General Specifications	
Construction	Polymer plastic
Dimensions	19cm x 13.5cm x 4.5 cm (7.4 inches x 5.3 inches x 1.8 inches)
Weight	350 grams (0.78 lbs) approximate without mounting bracket
Device Interfaces	RJ-11 (6P6C) power source connector; RJ-45 (8P8C) master - slave connector
Housing	IP65 water rated enclosure
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
Warranty	1 year limited warranty

System Topology



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Ordering Information

Part Number	Description
5-RLF00001-3	LF Exciter, High Power, Standalone, w/attached Reader Cable (5.0m/16.5ft)
5-RLF00001-3M	LF Exciter, High Power, Master, w/attached Reader Cable (5.0m/16.5ft)
5-RLF00001-3S	LF Exciter, High Power, Slave, w/M-S Interface Cable

Accessories

Part Number	Description
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