

## High-Definition IR Reader

### Description

The Elpas2 High-Definition IR Reader is a supervised, fixed infrared locating device. The reader is designed to detect and relay sub-room 'Location' and 'State' data in real-time from Elpas Active RFID IR-Enabled Asset, Personnel or Infant Protection Tags to host applications.

The reader can be easily integrated anywhere onto wired or wireless Ethernet/Wi-Fi networks (using an Elpas2 RF Ethernet Reader as a RS-485 BUS master) to enable indoor, facility-wide sub-room monitoring and tracking of assets or personnel in real-time.

Architecturally attractive and unobtrusive, the reader is easily surface mounted on solid walls and ceilings or flush mounted into dropped (false) ceilings. The Elpas2 IR Reader supports large tag populations at read-distances up to 15m/50ft (360° coverage area) and is remotely configurable for customized applications. On-board I/O ports enable the monitoring of one general purpose analogue input and control of one open-collector digital switched output.

The Elpas2 High-Definition IR Reader also supports XML messaging technology via the Elpas2 RF Ethernet Reader for integration with external systems plus RS-485 data transmission with up to 15 other Elpas2 IR readers.



Elpas2 High-Definition IR Reader

### Product Features

- Architecturally unobtrusive, cost effective design
- Sub-Room location accuracy
- Handles large tag populations
- Fully supervised, including tamper protection
- Low power consumption
- Read range up to 15m/50ft (360° coverage area)
- Remote configuration and range tuning
- Onboard I/O ports
- Elpas2 RS-485 compatible
- XML messaging technology (via Elpas2 RF Ethernet Reader)

### Security Applications & Uses

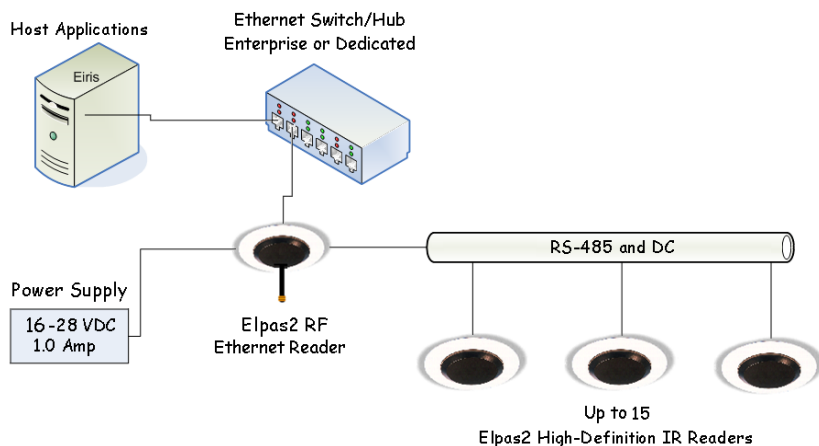
- Patient identification
- Assisted living facilities
- Infant protection
- Nurse/Patient call
- Wandering patient supervision
- Entrance/Exit based alarming
- Hands free access control
- Asset management & loss prevention
- Personnel and visitor safety

Operational Specifications	
Operating Frequency	455KHz
Read-Range (Note 1)	Installation grid: 15m/50ft radius
Tag Density	Up to 50 tag messages/second
Message Length	4-31 byte messages (encapsulated for messages > 4 bytes)
Buzzer Indicator	Upon Power-up: Beeps once Device Malfunction: Beeps continuously
Red LED Indicator	Corrupted firmware: Lites continuously Unregistered in EIRIS: Toggles on/off every second Tag/Badge Detection: Flashes once per message
Service Pin	Generates service message
Encoding	Factory programmed ID
RS-485 BUS	230Kbit/sec
Input/Output	1 analogue input, 1 open collector digital outputs (up to 100mA)
Power Requirements	16-28 Vdc/50mA
General Specifications	
Mounting	Surface mounted on solid walls and ceilings, Flush mounted into dropped (false) ceilings
Construction	Black polycarbonate plastic
Dimensions	17cm x 4 cm (6.6 inches x 1.6 inches)
Weight	200grams / 7.0 ounces approximate
Tamper Protection	Open 'State' spring loaded switch button
Device Interfaces	Four-position removable terminal block (RS-485 BUS & 16-28 Vdc) Two-position fixed terminal block (analogue input) Two-position fixed terminal block (1 digital output)
Operating Environment	Temp: -10°C to 70°C (14°F to 159°F); Humidity: 20% to 80% non-condensing
Storage Temperature	-40° to 70°C (-40°to 159°F)
Remote Configuration and Supervision	EIRIS 4.6.3 (or higher) software
Standards	CE Compliance: EN300220-1, EN300220-2, EN60950-1, ICES-003, CAN/CSA-CEI/ICE CISPR 22 FCC Compliance: FCC PART 15, Sub-part B, Class B FCC ID: O4X5-IRB0088 IC Compliance: 1467G IRB00880
Warranty	1 year limited warranty

Note 1: Read distances may be affected by environmental conditions and site characteristics.

All specifications are subject to change without notice.

### Typical System Topology



### Office Locations

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### Ordering Information

Part Number	Description
5-IRB00880	IR Reader, RS-485, Ceiling

### Accessories

Part Number	Description
5-500100	Power-Over-Ethernet Splitter, 24Vdc/0.5A
5-ERS02601	Power Supply, 24Vdc/2.2A
5-RDT09113	Reader Surface-Mount Plastic Ring (5 units)
5-RDT09100	Mounting Bracket (5 units)

### About Visonic Technologies

Visonic Technologies is a global leader in unified active RFID/RTLS solutions. The company caters to the needs of industries and institutions where the real-time identification and location tracking of people and/or mobile assets is mission critical to their internal security and safety operations.