

RF Ethernet Reader

Description

The Elpas RF Ethernet Reader is a supervised; 433MHz fixed receiving device. The reader is designed to detect, and relay real-time 'Location' and 'State' data from Elpas Active RFID Asset, Personnel or Infant Protection Tags to host applications.

The RF Ethernet Reader supports standard IT network communications and is easily integrated onto wired or wireless Ethernet/Wi-Fi networks to enable indoor, facility-wide monitoring and tracking of assets or personnel in real-time.

Architecturally attractive, the RF Ethernet Reader is designed to be flush mounted into dropped (false) ceilings. The reader supports large tag populations at read-distances up to 20m/65ft (360° coverage area) in open office environments and is remotely configurable for customized applications. On-board I/O ports enable the monitoring of one general purpose analogue input and control of two open-collector digital switched outputs.

The RF Ethernet Reader supports XML messaging technology for integration with external control and monitoring applications plus full-duplex RS-485 data transmission with up to 15 Elpas2 BUS devices.



Elpas RF Ethernet Reader

Product Features

- Architecturally unobtrusive, low cost design
- Real-time tag monitoring and tracking
- Read range up to 20m/65ft (360° coverage area)
- Wired/Wireless Ethernet/Wi-Fi compatibility
- Handles large tag populations
- Remote configuration and range tuning
- Onboard digital I/O ports
- RS-485 connectivity
- XML messaging technology

Applications & Uses

- Patient identification
- Assisted living facilities
- Infant protection (Elpas BabyMatch™)
- Nurse/Patient call
- Wandering patient supervision
- Entrance/Exit based alarming
- Hands free access control
- Mobile asset management & loss prevention
- Personnel and visitor safety

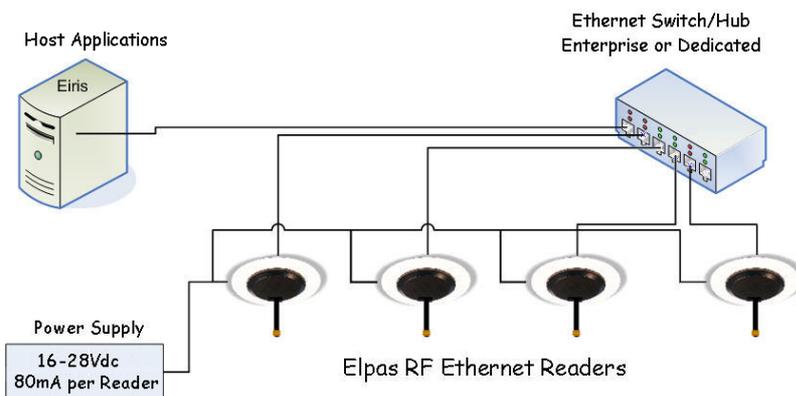
Elpas RF Ethernet Reader – Data Sheet

Operational Specifications	
Operating Frequency	432.92 MHz (868 MHz upon special request)
Ethernet	10/100Base –TX (auto-sensing)
Ethernet Specification	Version 2.0 / IEEE 802.3, Ethernet II frame type, UDP protocol
RS-485 BUS	230Kbit/sec
Read-Range (Note 1)	Installation grid: 20m/65ft radius
Sensitivity	-102dbm
Tag Density	Up to 125 tag messages/second
Message Length	4-31 byte messages (encapsulated for messages > 4 bytes)
Buzzer Indicator	Upon power-up: Remotely configurable Device Malfunction: Beeps continuously
Green LED Indicator	Upon power-up: Lites continuously
Red LED Indicator	Corrupted firmware- lights 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
Input/Outputs	1 dry contact analogue input, 2 open collector digital outputs (up to 100mA)
Power Requirements	16-28Vdc, 80mA at 24Vdc=2W
General Specifications	
Mounting	Ceiling flush mount
Construction	White polycarbonate plastic
Dimensions	17cm x 4 cm (6.6 inches x 1.6 inches)
Weight	200grams/7.054 ounces approximate
Tamper Protection	Open 'State' spring-loaded switch button
Device Interfaces	Female RP SMA connector (RF antenna) Female RJ-45 (8P8C) connector (Ethernet) Four–position removable terminal block (RS-485 Bus & 24Vdc) Two–position fixed terminal block (1 analogue input) Three–position fixed terminal block (2 digital outputs)
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
FCC & CE Compliance	FCC PART 15, Sub-part B, Class B (Grant # pending) EN60950-1, ICES-003, CAN/CSA-CEI/ICE CISPR 22
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.

System Topology



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Ordering Information

Part Number	Description
5-RFB00433	RF Reader Master, Ethernet, Ceiling, 433MHz

Accessories

Part Number	Description
5-500100	Power-Over-Ethernet Splitter, 24Vdc/0.5A
5-ERS02601	Power Supply, 24Vdc/2.A
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.

