Elpas
Active RFID/RTLS Solutions

Elpas Local Controller with I/Os

Description

The Elpas Local Controller with I/Os (ELC) is a programmable RTLS appliance that provides stand-alone, real-time monitoring and control of Elpas RTLS Safety and Safety solutions. The device features the full functionality of a RF IP Reader and can be mounted onto walls and ceilings or placed above dropped ceilings

The ELC can simultaneously monitor up to 5,000 Elpas Active RFID Tags at read distances up to 20m/65ft and can control up to fifteen fully supervised Elpas BUS RF/IR Readers, I/O Boxes, Elpas Display Panels, LF Exciters and Proximity Readers. The controller also supports thirty-two programmable logic rules that define which device outputs on the BUS will be set in response to detected tag and input events and store in memory up to 3,000 event transactions.

The ELC contains seven supervised analog inputs for monitoring alarm sensors (such as motion detectors and door contacts) as event triggers. The controller also has two open collector digital outputs plus three digital relay outputs that actuate devices (such as electric door locks, sirens, visual indicators) when an alert is triggered.

The ELC can communicate with VT's Eiris RFID/RTLS Tracking Software or ELC Programmer Software as well as networked 3rd party management systems via Ethernet using standard XML.

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Elpas Local Controller with I/Os

Product Features

Stand-Alone monitoring and control

Real-time tag tracking

20m/65ft (360° coverage) read range

Remote Ethernet configuration

Seven analog inputs/Five digital outputs

RS-485 connectivity

tamper protection

Rule-based alert output processing

12 Vdc battery backup

XML messaging technology

CE, FCC, IC certified

Applications & Uses

Mobile asset management

Personnel and visitor safety

Infant abduction protection

Wandering patient tracking

Hands-Free access control

Wireless nurse call

Senior living supervision & control

Intrusion protection

Entrance/Exit based alarming

Duress alerting

Visonic Technologies
Enterprise Protection Solutions

Contact: marketing@visonictech.com
Visit: www.visonictech.com
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Elpas Local Controller with I/Os - Confidential Technical & Product Specifications

Controller Specifications	
Tag Capacity	5,000 Tag IDs
Historical Logs	3,000 event transactions
Tag Denisity	300 event/tag messages/second
Remote Device Control	Elpas BUS devices (up to 15) Wired BUS Inputs Wired BUS Outputs
Device Supervision	Lost Away, Communication Problems, Low Voltage, High Noise, Enclosure Tamper,
Input Supervision	4 Level (Open, Closed, Line Short, Line Cut) using optional Elpas End-of-Line Terminator
Time Zones	16 time zones (including support for holidays)
Programmable Logic	32 user configurable Rules and Actions

Receiver- Specifications	
Ethernet	10/100Base –TX (auto-sensing)
RFID Frequency	432.92 MHz (868 MHz upon special request)
Ethernet Specification	Version 2.0 / IEEE 802.3, Ethernet II frame type, UDP protocol
RS-485 BUS	230Kbit/sec
Read-Range	Installation Grid: 20m/65ft radius
RF Sensitivity	-102dbm
Tag Density	Up to 125 tag messages/second
Message Length	4-31 byte messages (encapsulated for messages > 4 bytes)
Buzzer Indicator	**Power-Up:** Beeps once **Device Malfunction:** Beeps continuously
Green LED Indicator	Lights continuously when powered
Red LED Indicator	**Corrupted Firmware:** Lights continuously **Tag Detection:** Flashes once per message **Unregistered in Eiris/ELC Programmer:** Toggles on/off every second
Tamper Switch	Generates service messages
Encoding	Factory programmed ID
Input/Outputs	7 analog inputs 2 open collector digital outputs (up to 100mA) 3 digital relay outputs (up to 10A)
Power Requirements	110mA @ 24VDC
Battery Backup Input	12 Vdc….Recommended battery: Sealed Lead- Acid-12Vdc/4.5Ah or 7.0Ah
Output Power	12Vdc, 100mA (Max)

General Specifications	
Construction	White polycarbonate plastic
Dimensions (H x W x D)	10.5 x 16.0 x 3.5 cm (4.0 x 6.0 x 0.5 inches)
Weight	180 grams/6.3 ounces
Tamper Protection	Open 'State' spring-loaded switch button
Device Interfaces	**RF Antenna:** Female RP SMA connector. **Ethernet:** Female RJ-45 (8P8C) connector **RS-485 Bus & Power:** 4 Female RJ-11 (4P4C) connectors **Analog Input:** Two–position removable terminal block **Digital Outputs:** Three–position removable terminal block …..**Battery Input:** Two–position fixed terminal block
Operating Environment	Temp: -10°C to 70°C (14°F to 159°F); Humidity: 20% to 80% non-condensing
Remote Configuration	ELC Programmer Software (V2.0 or higher)….Eiris 4.7 (or higher) Enterprise Software
Compliance Standards	**FCC:** 04X5- RFB00433……….**IC:** 1467G-RFB00433 ……….**CE:** EN60950-1, CAN/CSA-CEI/ICE CISPR 22
Warranty	1 year limited warranty

Note: **Read distances may be affected by environmental conditions and site characteristics**.   **All specifications are subject to change without notice.**

The following Elpas Tags are not compatible with the Elpas Local Controller:
433MHz Alert Tag (5-ALB00001, 5-PLB00001)   **Alert Tag (IR) – with Pull** (5-PWB00001)   **433MHz Wrist Tag** (PWB00901, 5-PWB00901-1, 5-PWB00901-4)
433MHz Pediatric Tag (5-BTB00433-1, 5-BTB00433-2, 5-BTB00433-3, 5-BTB00433-8)

Ordering Information

Part Number	Description
5-ELC00433-3	ELPAS Local Controller, Wall, 433MHz, I/O (7/5)
5-IOX00001	End-of-Line Terminator for Elpas & AXS Inputs (5 units)
5-JBA00485	RS-485 Junction Box, 4 RJ11 Ports
5-500100	Power-Over-Ethernet Splitter, 24VDC/0.5A
5-ERS02800	P60 Power Supply, 24VDC/2.5A
5-RDT09100	Mounting Bracket (5 units)
5-RDT09113	Reader Surface-Mount Plastic Ring (5 units)

For a complete list of compatible accessories, please contact your local VT Sales Representatives.

Cabling Options

Part Number	Description
5-ERS02721	Network Drop Cable, 2.5 Meters/8.0 Feet
5-ERS02721-1	Network Drop Cable, 5.0 Meters/16.0 Feet
***5-ERS01905-10**	Reader Certified Cable w/2RJ11 connectors, 10Ft
***5-ERS01905-15**	Reader Certified Cable w/2RJ11 connectors, 15Ft
***5-ERS01905-15P**	Reader Certified Cable w/2RJ11 connectors, 15Ft, Plenum Rated

* Available only in the Americas

About Visonic Technologies
Visonic Technologies (VT) is a global leader in Active RFID/RTLS Safety and Security solutions for healthcare.

VT delivers out-of-the-box as well as custom-tailored risk mitigation tools that enhance patient and personnel safety; reduces asset shrinkage and labor costs; lessens negligence litigation and facilitates industry guideline compliance.

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