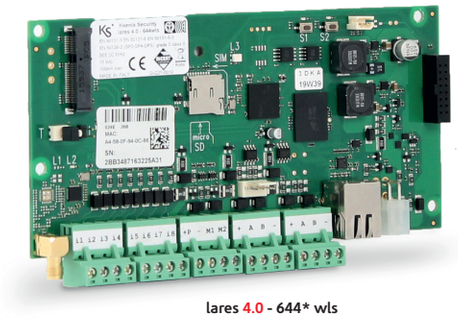
lares 4.0

Hybrid IoT Control Panels for Security and Home & Building Automation



lares 4.0 - 644* wls

lares 4.0 - 16

lares 4.0 - 40

lares 4.0 - 40 wls

lares 4.0 - 140 wls

CERTIFICATIONS

EAC
EN50131 Grade 3 - class II
T031:2017
SSF 1014 Larmklass 3

App Ksenia Pro Installer

App lares 4.0 User

5 years warranty

lares 4.0 versions and characteristics

Ksenia pro and lares 4.0 APPs included

KSI1400016.300 - lares 4.0 - 16
up to 16 IN + 16 OUT with 6 partitions - native with Ethernet interface.

KSI1400040.300 - lares 4.0 - 40
up to 40 IN + 40 OUT with 12 partitions - native with Ethernet interface.

KSI1410040.300 - lares 4.0 - 40 wls
up to 40 IN + 40 OUT with 12 partitions native with Ethernet interface and 868 MHz bidirectional wireless (DPMS technology - Dynamic Power Management System) and double BUS on board.

KSI1410140.300 - lares 4.0 - 140 wls
up to 140 IN + 140 OUT with 20 partitions native with Ethernet interface and 868 MHz bidirectional wireless (DPMS technology - Dynamic Power Management System) and double BUS on board.

KSI1410644.300 - lares 4.0 - 644* wls
up to 644 IN + 644 OUT with 30 partitions (and beyond on specific project): native with Ethernet interface and 868 MHz bidirectional wireless (DPMS technology - Dynamic Power Management System) and double BUS on board.

**lares 4.0 - 644+ wls: for projects with a number of zones and/or outputs higher than the 644 already available, it is possible to study a custom solution.*

lares 4.0 description

lares 4.0 control panels are the ideal and the most advanced solution within the IoT technologies, both for Physical Security (Intrusion, Video Surveillance, Access Control) and Home & Building Automation.

All lares 4.0 are hybrid (wired and wireless) and have a number of outputs equal to the number of inputs for lights, HVAC, irrigation, shutter blinds and any other kind of automation or household appliance. The control panel can be managed by the end-user through an App called lares 4.0 and can be programmed by the Installer via any mobile terminal, thanks to the Ksenia Pro App.
Ksenia PRO App allows you to centralize and geo-locate all the installed control panels and offer the best assistance to the end-user by receiving push notifications, even technological alerts; by implementing a web server inside the motherboard, no PC programs are required, remote configuration takes place via web (locally or via the Ksenia SecureWeb cloud).

Regardless of the model of lares 4.0, the motherboard is designed with an Ethernet interface, 8 input terminals and 2 terminals that can be configured as inputs or outputs. The control panel is available in two versions: with one BUS (compatible, except for some exceptions, with all existing Ksenia BUS devices) or double BUS and 868MHz bi-directional wireless transceiver (compatible with all existing Ksenia wireless devices). The motherboard is also designed with a Micro SD Slot for create and restore backup local configuration and for upgrade the system, a connector for 4G/LTE module and a connector for PSTN module.
It is possible to configure and send voice messages, emails, sms, push notifications, Contact ID and SIA DC-09 level III protocol to the Surveillance Centers.

lares 4.0 control panel is designed to optimally take the strictest installation and management conditions and for the most "sensitive" applications.

The motherboard can be installed inside our metal boxes. Together with the motherboard you can install inside up to 7 expansion modules, a 18Ah backup battery and a 50W switching power supply.

Performances and capacities

lares 4.0 allows you to manage up to 5 simultaneous HTTPs connections with loading times of a few seconds, storing hundreds of screenshots from the supported IP cameras, doing the backup of local programming on SD-card, etc.

- Flash memory (space code):	4 MB
- RAM:	512 KB
- CPU Clock:	240 MHz
- Drystone MIPS (Mln. Instr. per sec.):	480
- NOR data memory:	32 MB
- NAND data memory (eMMC):	4 GB
- SD card slot:	yes

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lares 4.0

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lares 4.0 wls 96

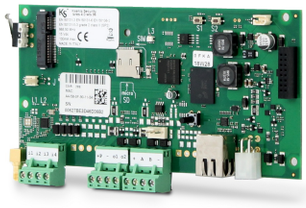
lares 4.0 wls 96 description

lares 4.0 wls 96 is the wireless version of lares 4.0 family, to which a minimum wire expandbility has been added. It is able to manage up to 96 zones (40 wired max) and 18 outputs (16 wireless max), 5 partitions, 4 IP inputs.

Unlike lares 4.0, lares 4.0 wls 96 is distributed with a white or black polycarbonate box, in kits different in content, to meet the customers need.

CERTIFICATIONS

EAC
EN50131 Grade 2 - class II
T031:2017
SSF 1014 Larmklass R



App Ksenia Pro Installer

App lares 4.0 User

5 years warranty

lares 4.0 wls 96 Kits
Ksenia pro and lares 4.0 APPs included

KSI1410096.301 - lares 4.0 wls 96 Kit
It is able to manage up to 96 zones, 40 of which are wired, and 18 outputs. It can be expandable with an KS-BUS: up to 3 user interfaces (to be chosen among ergo keyboard, volo and volo-in proximity readers), 1 BUS siren (imago or radius), 1 domus to manage the functions of the chronothermostat, 6 expansion modules (a choice among auxi and auxi-H), 2 among opis and divide. IP peripherals management (ergo-T, gemino IoT, porta 4.0, cameras). Provided with white polycarbonate box, integrated indoor siren, 25W power supply and a slot for 12V-2Ah lead-acid battery.
Dimensions: 297x220x55 mm.
KSI1410096.302 with black polycarbonate box.

KSI1414096.301 - lares 4.0 wls 96
Same features as the KSI1410096.301 but with the add-on 4G/LTE module.
KSI1414096.302 with black polycarbonate box.

KSI1414096.311 - lares 4.0 wls 96
Same features as the KSI1410096.301 but with ergo-S soft-touch keypad integrated on the cover and add-on 4G/TE module.
KSI1414096.322 with black polycarbonate box and integrated ergo-S Keypad.

Technical characteristics

Metal box characteristics Dimensions (wxhxd)	**KSI141X096.3XX** 297x222x58mm	**KSI7402117.010** (switching power supply 25W) 255x295x85mm		**KSI7403130.010** (switch.p.s. 50W) 325x400x90 mm	**KSI7404130.010** (switching power supply 50W) 325x440x90 mm	
lares 4.0	wls 96	16	40	40 wls	140 wls	644 wls
Backup batteries	2Ah	7Ah			18Ah	
Max. battery recharge time to 80%	3h	10h			24h	
Power supply voltage	230 V~ -15/+10% 50 Hz 0,4A			230 V~ -15/+10% 50 Hz 0,8A		
Power Supply Battery Charger (Type A norm EN50131-6)	15V ± 1% 1,7A			15V ± 1% 3,4A		
Maximum current available for external devices and optional modules	160mA grade 2	580 mA grade 2 230 mA grade 3		1500 mA grade 2 600 mA grade 3		

lares 4.0 control panel	**wls 96**	**16**	**40**	**40 wls**	**140 wls**	**644 wls**
Current consumption (med./stand-by)	50mA	40mA	40mA	60mA	60mA	60mA
Current consumption (max.)	80mA	70mA	70mA	100mA	100mA	100mA
Max. output voltage ripple	120 mV					
Max. current for battery charging	800 mA					
Deep discharge voltage protection	10 V					
Low battery threshold (restore)	<11 V (13 V)					
Low voltage threshold	12 V Voltage below which the power supply output fault is signaled					
Maximum number of inputs	96	16	40		140	644
Built-in inputs (fixed + programmable)	4	8	8		8	8
Maximum number of outputs	18	16	40		140	644
Ethernet connectivity management	YES					
Power supply fault detection	YES					
Over voltage protection	YES (17 V)					
Combinations of Digital Key	More than 4 billions					
Alarm transmission system	SP2, DP1, SP4, DP3					
Time for generation and transmission of alarm messages	3 sec.					
Time for detection and presentation failures	10 sec.					
Protection class	IP 34					
Security grade	2	3				
Environmental class	II					
Isolation Class	I					
Weight (with battery)	2.3 Kg (4.5 Kg)		4.2 Kg (10 Kg)			
Operating range	+5 / +40 °C					
Humidity (not condensed)	95 %					

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lares 4.0

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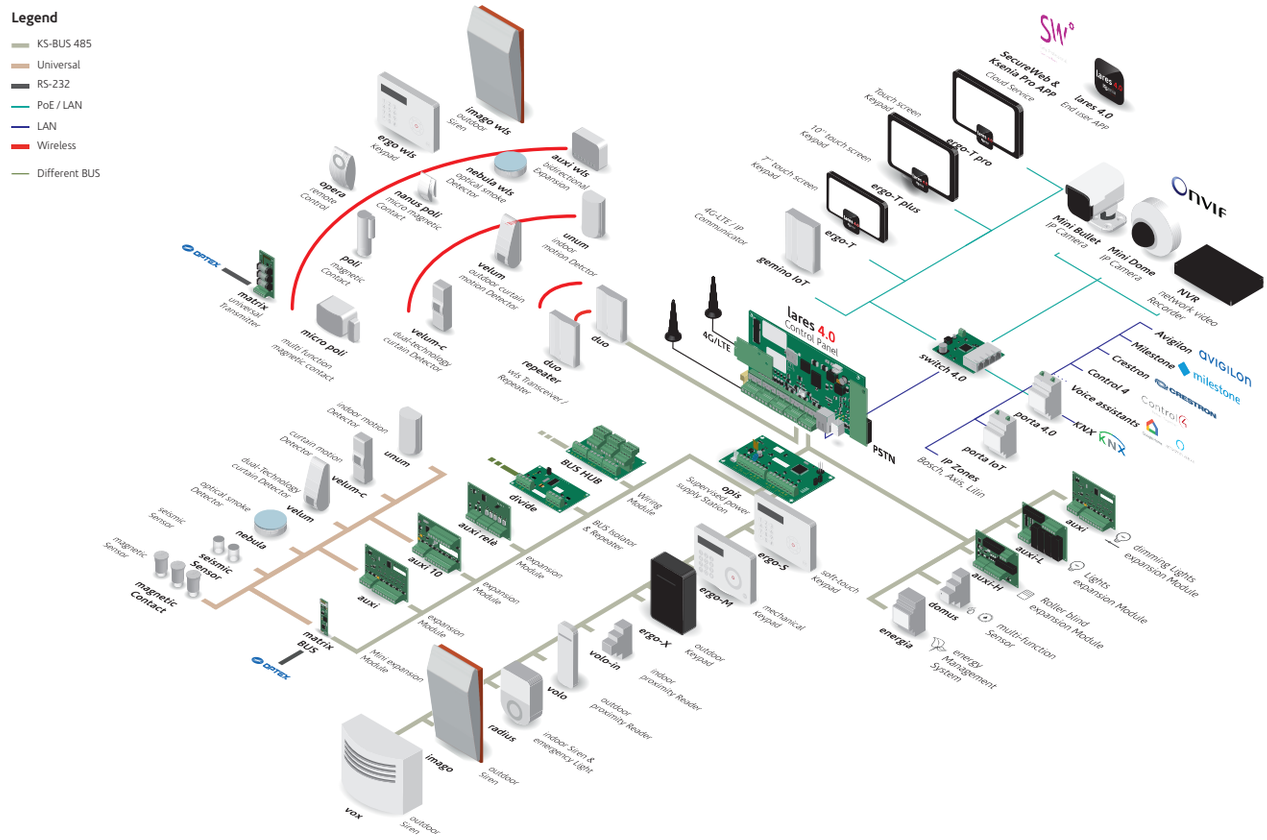
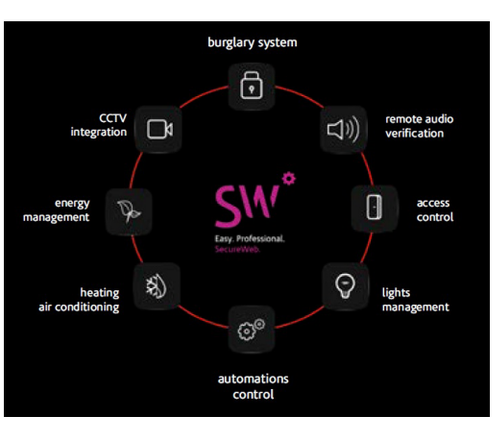
Ksenia solutions range





Main features

SECURITY

- KS-BUS interface for connecting Ksenia peripherals, which allow to expand the capabilities and functionalities of the control panel. In the wireless versions, the panels have a double BUS on board, the speed is doubled and isolation is also guaranteed even in case of severe failure of one of the two BUS.
- Communication Add-On can be connected to the control panel board: one for the mobile part (4G/LTE), the other one for the PSTN part.
- 4GB eMMC memory to save programming data, event logs, device firmware update, screenshots of IP cameras.
- lares 4.0 monitors both the external power supply voltage and the battery voltage
- Ethernet connectivity: thanks to the Ethernet interface already integrated on the motherboard
- ONVIF compatibility: cameras compatible with the ONVIF protocol (Open Network Video Interfaces Forum) can be integrated without additional cards
- KONNEX compatibility through porta 4.0 device
- Fully integrated with Control4 and Creston world through the development of proprietary drivers
- Fully tntegrated with Avigilon Control Center through porta IoT device
- Ksenia Security has developed a dedicated plugin allowing the integration of a virtually unlimited number of lares 4.0 with the Milestone XProtect® platform.
- Unlimited virtual voice messages, generated by a text-to-speech (TTS) synthesis engine, available thanks to the Loquendo® libraries of Nuance Communication
- Video verification
- Firmware update remotely with automatic download by the control panel, without the need to restart the control panel itself or any device.
- Backwards compatible firmware
- Compatibility with future devices, simply by updating the firmware of control panel.

HOME & BUILDING AUTOMATION

- Lighting
- Heating / air conditioning systems
- Irrigation systems
- Automation and load control
- Audio and video surveillance
- Access control
- Rooms/Maps: each device that has been programmed on the system (sensors, outputs, cameras, etc.) can be combined with one or more rooms and an image to each room.
- Voice assistants: integration with Google Home & Amazon Alexa for managing Smart devices through a simple voice command.

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Ksenia security innovation

lares 4.0

Hybrid IoT Control Panels for Security and Home & Building Automation

lares 4.0 performances

	lares 4.0 wls 96	lares 4.0 - 16	lares 4.0 - 40	lares 4.0 - 40 wls	lares 4.0 - 140 wls	lares 4.0 - 644+
Zones management						
Number of Zones (of wich radio)	96 (96)	16 (16)	40 (40)	40 (40)	140 (64)	644 (64)
Number of wired Zones	40	16	40	40	140	644
Support for IP Zones	●	●	●	●	●	●
Custom EOL Balances	1	2	4	4	14	64
Number of Outputs (of which radio)	18 (16)	16 (16)	40 (40)	40 (40)	140 (128)	644 (128)
Virtual Outputs (timer)	●	●	●	●	●	●
On board features						
I/O terminal	2 (Out only)	2	2	2	2	2
Inputs	4	8	8	8	8	8
868MHz radio interface	●	-	-	●	●	●
BUS interface	1	1	1	2	2	2
Indoor Siren Connector	●	-	-	-	-	-
Partitions	5	6	12	12	20	30
Arming Modes	8	8	32	32	64	128
Hashtags	2	2	12	12	20	64
Rooms (graphic maps)	8	12	24	48	64	128
Timer for Scheduler	4	8	64	64	64	128
Event log	1500	1500	1500	5000	10000	10000
Number of users	16	16	64	128	512	1024
Programmable Logics	32	8	16	24	40	64
Chrono-thermostats	1	0	8	8	24	40
Counters	4	1	12	12	20	30
Meters (energia)	2	0	3	6	12	18
Scenarios and Notification						
Scenarios	8	8	32	32	128	512
Configurable event groups for scenarios/actions	32	32	64	64	256	1024
Contact Lists	8	8	8	8	16	32
Contact ID receivers (pairs)	1	1	3	3	3	3
SIA receivers (pairs)	1	1	3	3	3	3
Configurable event groups for Notifications	16	16	32	32	64	128
IP Expandability						
IP Cameras	4	4	12	12	20	30
ergo-T/ergo-T plus/ ergo-T pro	1	2	4	4	8	14
gemino IoT	1	1	1	1	1	1
porta 4.0/porta IoT	1	1	1	1	1	1
IP Supervisors (Control 4 and Crestron integration)	1	1	1	1	1	1
BUS Expandability						
User interfaces (ergo; ergo-S/M; ergo-X; volo; volo-in)	3	6	24	24	40	64
I/O modules (auxi; auxi-10; auxi-R; auxi-H; auxi-L)	6*	4**	24	24	64	200
Single expansion (matrix BUS)	4	8	40	40	40	64
Sirens (radius, imago, vox)	1	6	24	24	40	64
Isolators (divide, opis)	2	4	12	12	20	32
Transceivers (duo)	0	2	2	1 (2***)	1 (2***)	1 (2***)
Home automation sensors (domus)	1	0	8	8	32	64
Load controllers (energia)	1	0	1	3	6	6
Wireless Expandability						
Sensors (micro poli, poli, nanus, unum, nebula, velum, matrix)	32	16	40	40	64	64
I/O module (auxi wls)	8	8	20	20	64	64
Sirens (imago wls)	3	3	3	3	5	5
Repeaters (duo)	2	2	2	2	2	2
Keypads (ergo wls)	4	2	3	3	4	4
Remote controls (opera)	16	16	64	64	64	64

* Supports only auxi and auxi-H

** Does not support auxi-H

*** Second BUS receivers can be used disabling on board Transceiver

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